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ABSTRACT

The fact that much of learning occurs beyond school walls points to the need for a holistic approach to education. Such an approach involves planned cooperative links between family and the formal and informal learning environments that exist in the community. This monograph advocates such a holistic approach, discussing not only the value of informal learning for children, but also the role that school, home, institutions, and community groups may play in enhancing children's quality of life. The articles in the monograph are: (1) "Opportunities for Learning and Development in Multiple Settings" (Alice R. Galper); (2) "Toddler Story Hours, Poetry Concerts and Internet Access--Now Available at the Library" (Ann Carlson Weeks); (3) "The World at Their Fingertips: Children in Museums" (Mary K. Judd and James B. Kracht); (4) "Zoos Aren't What They Used To Be: They Are Better!" (Thomas N. Turner), (5) "Learning about Work: Extending Learning through an Ecological Approach" (Kevin J. Swick); (6) "Community Service Groups Enhance Learning" (Alicia I. Pagano); (7) "Oral History: Engaging Students in Community-based Learning" (Ceola Ross Baber and Mary W. Olson); (8) "Learning in Communities with Limited Resources" (Cynthia Szmanski Sunal, Lois M. Christensen and Dennis W. Sunal); (9) "Learning through Serving" (Joan Schine); (10) "Learning in Your Own Backyard" (Robert B. McDonald and R. Tim Nicosia); (11) "The Family as a Resource for Learning" (Carol Seefeldt and Kristin Denton); and (12) "Learning Options with Personal Computers: Now and in the Future" (Seven B. Silvern). (HTH)

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Learning Opportunities Beyond the School

2nd Edition

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Learning Opportunities Beyond the School

2nd Edition

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Shirley S. Beck,
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Introduction

Educators and social scientists recognize that learning takes place in multiple and interactive settings. The fact that much of this learning occurs beyond school walls points to the need for a holistic approach to education. Such an approach involves planned cooperative links between family and the formal and informal learning environments that exist in the community.

This monograph advocates the holistic approach. It supports the view that a synergistic result is achieved when educators, parents and community residents work together to provide children with a comprehensive approach to learning and growing.

Learning Opportunities Beyond the School discusses not only the value of informal learning for children, but also the role that school, home, institutions and community groups may play in enhancing children's quality of life. Finally, this monograph is designed to increase the reader's awareness of creative learning options offered by the above entities that may strengthen children's fundamental knowledge, skills and values.

Alice R. Galper provides a rationale for a holistic approach to learning and development. She highlights the importance and value of comprehensive and integrated learning experiences for children and families and provides guidelines for effective programs.

Ann Carlson Weeks reminds us that the public library offers more learning options than ever before. She focuses on the range of services and materials available in many public libraries and spotlights innovative programs for children and families.

Mary K. Judd and **James B. Kracht** believe children can have the world at their fingertips at the local museum. They explain how museum programs can demystify the adult world by offering young patrons opportunities to participate in multisensory exhibits. Their chapter offers suggestions to parents and educators for making the most of a museum visit.

Thomas N. Turner says "Zoos are a picnic for sensory learning." He describes the educational opportunities available through zoological parks and suggests captivating activities that children of all ages can enjoy as they learn about animals. In addition, he provides a select list of the finest zoological parks in the U.S., a bibliography of books about animals and zoos, and a sampling of zoo Internet sites.

Kevin J. Swick believes children need to understand the natural connections among work, family and the community and the significant role education plays in all these arenas. This chapter focuses on how children can learn about the world of work through developmentally appropriate experiences in various social contexts. The author also offers important principles to remember when planning meaningful school-workplace experiences.

Alicia I. Pagano shares how community service organizations such as the Girl Scouts of the U.S.A., Boys Clubs of America and Camp Fire, Inc., play a vital role in the education and development of youth. She highlights the best of these programs and illustrates how they supplement and complement children's academic training.

Ceola Ross Baber and **Mary W. Olson** recommend an oral history project, the popular "Foxfire" concept, as a captivating strategy that takes students beyond the classroom

to learn about and from their community. In the process, students' academic, social and personal skills are refined while they acquire new knowledge and clarify values. The authors describe an oral history project from inception to final product, providing timely ideas on how to publish locally as well as on the World Wide Web.

Cynthia Szmanski Sunal, Lois M. Christensen and **Dennis W. Sunal** believe children in rural and small towns have access to the world's culture through the residents and resources of their community. The authors recommend the use of creative events and projects such as "community days," "multi-media heritage sets" and "adopt-a-school programs" to help children develop a sense of community and an appreciation of their heritage. They offer fundraising ideas to support projects, and they provide suggestions on how rural educators can use the Internet to locate valuable resources.

Joan Schine provides a convincing argument that youth participation programs enable young adolescents to move closer to responsible adulthood. Both youth and the community benefit from these cooperative ventures. She highlights the critical elements to consider in planning successful service projects with and for youth.

Robert B. McDonald and **R. Tim Nicosia** remind us that parents may provide children with a rich environment for learning within the confines of their own home and yard. They offer activities guaranteed to stimulate children's language, problem solving and creativity, and they provide a bibliography of useful resources for parents.

Carol Seefeldt and **Kristin Denton** begin their chapter by examining the role of the family as a rich resource for children's learning. They discuss how the family's present and past serve to inform children of their role in today's culture. The authors provide innovative ways families and educators can work together to enable children to experience life fully, today and in the future.

Steven B. Silvern provides commonsense suggestions for the use of the computer in family settings. He recommends that the machine must be viewed as a toy in its best sense: something that is non-threatening, enjoyable, entertaining, and that provides information or a useful service. He offers parents and educators a balanced approach to the use of technology with children.

We are grateful to these authors for the new perspectives they have provided on the opportunities available for learning beyond the school.

Opportunities for Learning and Development in Multiple Settings

More and more educators and child development professionals are recognizing that child development and learning take place in multiple and interactive settings. Many of these settings exist beyond school walls and have little to do with the traditional curriculum and structure of formal education. While current theory in human development has refocused thinking on the identification of non-school settings as contexts for learning and growth, recent developments in American society, which place more and more children at risk, make it imperative that Americans begin to reweave the fabric of community (Children's Defense Fund, 1996). The consideration of a holistic approach to learning that involves planned cooperative links among family and the formal and informal learning environments existing in the community becomes all the more important when one considers that never before in history have the majority of young children been exposed to such a multiplicity of settings (Children's Defense Fund, 1994).

The number of settings has increased in response to the growing demand for out-of-home care and education during the early years. At the same time, program sponsorship has become more diverse (Bredekamp, 1987). Children are enrolled in programs at younger ages, for example, many from infancy. In response to employed parents' needs, the duration of the program day has lengthened. Many children may need to make the transition from a morning program to an entirely different afternoon setting. Public schools and businesses are playing a larger role in providing before- and after-school settings for young children. As a result, the number and complexity of environments in which children find themselves increase. Throughout childhood, then, children are participating in a variety of ecological transitions that require adaptation to novel or altered environments.

This chapter will explore the rationale for a holistic approach to learning and development for children and families, and examine the formal and informal learning environments that exist in communities. An overview of some current practices and programs will be presented and the importance and value of informal learning experiences will be highlighted. Finally, emphasis will be placed on the need to conceptualize and evaluate non-school settings, in order to understand the values and social skills they convey to children.

Rationale

What provides the rationale for a holistic approach to learning and development that recognizes the vital importance of learning opportunities beyond the school? First, society needs comprehensive support systems for home and school. Addressing children's needs will tax all available resources both in and outside of schools (Edwards & Jones Young,

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1992). Over a decade ago, Kenneth Keniston (1981) wrote:

> I think it is now indispensable for us to see that millions of American children who suffer unmet needs for care and opportunity should not be blamed, nor should their parents, for crippling situations that are in fact wrought by us all within the system. No doubt individualism can and should continue to be a cherished value of this society. But it is time for us to behave not like a collection of competing individuals but like a family of related people. It is time for old-style individualism to give way to some old-style sense of community. (p. 45)

Second, although the "old-style sense of community" may no longer be possible, the most promising perspective for viewing research and practice in human development as they relate to multiple and interactive settings comes from the theoretical framework proposed by Bronfenbrenner in *The Ecology of Human Development* (1979):

> The ecology of human development involves the scientific study of the progressive, mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by relations between these settings, and by the larger contexts in which the settings are embedded. (p. 21)

A setting is a place where people can readily engage in face-to-face interaction, such as the child care center, playground, library, museum, after-school program or internship program for young adolescents. According to Bronfenbrenner (1979), however, environments that are relevant to human development are not limited to the single immediate settings that have been emphasized to the greatest extent in the literature: home and school. In fact, human development is affected by immediate settings, interaction between immediate settings, and larger settings that include the institutional patterns of a culture, which influence the ways institutions are organized and, therefore, the ways in which human development occurs. For example, the value that a particular culture places on the neighborhood or the parents' workplace will influence how families and children perceive or experience their lives.

Bronfenbrenner's complex ecological framework provides the basis for recent assessments of interactive learning environments' effect on child growth and development. For example, the Head Start-Public School Early Childhood Transition Project, which was legislated in the Human Services Reauthorization Act of 1990 and is now operating in 31 demonstration sites, employs an ecological model to conceptualize the relationship between continuous comprehensive and integrated services and settings provided to former Head Start children and their families through the primary grades, and multiple child and family outcomes (Ramey & Ramey, 1992). For the purposes of this discussion, two hypotheses proposed by Bronfenbrenner seem particularly relevant.

1. The direction and degree of psychological growth are governed by the extent to which opportunities to enter settings conducive to development in various domains are open or closed to the developing person. (p. 288)
2. The developmental potential of a setting is increased as a function of the number of supportive links existing between that setting and other settings. (p. 215)

Given the above, 1) the child must be afforded opportunities to enter a variety of quality settings outside the school and 2) there must be a concerted effort on the part of program providers to work together to provide connections for children and families.

Identification of Non-School Settings

The focus of concern about non-school settings now includes not only opportunities for learning, but also the potential for nurture and development. The discussion cen-

ters on home, school and community partnerships to create settings that facilitate children's long-range success (Epstein, 1995; Regional Educational Laboratories' Early Childhood Collaboration Network, 1993; Stone, 1995; Washington, Johnson & McCracken, 1995). The common denominators in most non-school settings are underfunding, overutilization, dependence on the good will of volunteers, and a considerable degree of staff "burnout." It appears appropriate that the responsibility for such programs and for the integration of resources and services is now being placed on broadly defined communities (including the public sector, business and industry, local nonprofit agencies, service agencies and media representatives) and society at large.

For many years, the author of this chapter has been teaching a course titled, "Creating Learning Environments in Developmental Settings." This advanced education course for college students is designed to complement an internship program for students pursuing careers in non-school settings. Such internships may take place in children's museums, zoos, infant centers, parent-child centers, centers for battered women and their children, infant stimulation programs, settings for exceptional children, community centers, school-based after-school recreation and tutorial programs, child care networks, multicultural programs for children and families requiring the ability to function in more than one language, and hospital pediatric centers.

The above settings have tremendous potential as learning environments. Well-planned and supportive non-school settings not only enhance the quality of life for children and families, but are basic to healthy personality development.

Components of Effective Programs

Given that a non-school setting is open and available, how is it possible to determine the value of the experiences it provides? Are youngsters developing a sense of respect for the dignity of elderly persons through their experiences at a nursing home, or are they developing fear of the elderly and the aging process? Are children in a community after-school program learning the value of competition when the program attempts to facilitate cooperation? Are cooperative efforts in learning and development burdened with unclear purposes, roles and expectations? Since these and other questions arise frequently, there is a need to analyze non-school settings. The following queries (while not exhaustive) can be used to determine the quality of these settings for children and interns:

- Are the cognitive and psychomotor aspects of the setting congruent with the theoretical approach or approaches to learning and development? Are they appropriate for the age and special needs of the children served? For example, if the setting has defined itself as Piagetian-based, are interactive play experiences emphasized?
- If the setting is a result of a community partnership, are information and resources shared to support a long-range collaborative effort? Is decision-making a shared process?
- Is the culture and the language of the children served reflected in program practices, materials and activities?
- Are principles of inclusive practice evident for children with developmental differences?
- Is there evidence of spatial planning? Have the effects of space on learning been considered? Space is often a problem for non-school settings. Programs may exist in discarded or borrowed areas that were never intended to meet the needs of the program. Much can be done, however, to ensure that non-school settings are in safe, flexible, noise-controlled and inviting environments that support program goals.

- Is there evidence of planning for personnel? Has consideration been given to orientation, training, rewards, challenge, support, sharing and feedback? Professionals, paraprofessionals and volunteers need opportunities to participate in decision-making. Roles must be adequately and clearly defined.
- Are parents included in the planning and implementation of the program whenever possible? Are multiple and varied opportunities provided for parents to participate?
- Are inviting materials and activities available to meet the goals and objectives of the program? Is there evidence of prudent planning? Clearly, non-school settings provide opportunities to capitalize on incidental learning, community activities and events, and the resources of individuals in the community. Non-school settings are not bound by rigid curricular sequences. Conversely, the program must have overriding goals and learning opportunities that are well-conceptualized, planned and evaluated for their impact on children.
- Is there evidence of flexible use of children's time? Children need time to interact with each other and the elements of the environment at an individual pace. Many children in after-school programs need rest, solitude and peaceful moments after the demands of the school day.
- Are there supportive links between the non-school setting and other settings that encourage goal consensus? It is not impossible to establish and maintain links and communication networks. Formal and informal information exchange among the parents, the school and the after-school program facilitates a child's development and the ease with which the child moves from setting to setting. What Bronfenbrenner (1979) terms "intersetting knowledge" can take a variety of forms, depending on the setting.
- Is there evidence of consistent evaluation and observation? The Regional Educational Laboratories' Early Childhood Collaboration Network (1995) emphasizes the need for evaluation at every level to determine how well the partnership works, how services for children and their families have improved, and how the community has changed as a result of the effort. Ongoing observation and evaluation of non-school settings by all participants are necessary to demonstrate the value of the experiences and to improve the quality of the setting. Evaluation procedures need not always be elaborate and technical. All professionals *do* need to know that what they are doing enhances the quality of life for children in their settings.

Conclusion

The rationale exists for a rededication to a holistic approach to learning and development. Children will learn beyond the school walls, even in the absence of efforts to identify and capitalize upon non-school settings. If we are remiss in our duties, children will not experience directly the activities that give meaning, richness and value to life.

Instead, they will use devices for vicarious experience, which include the ever-expanding world of television and video, or they will directly experience the increasing violence and risk inherent in many communities. Values and social skills will be modeled by television and film personalities, or acquired away from the context of family, community and culture. Given the increase in stress and risk factors that might be expected to affect the quality of life for great numbers of children now and in the long term, there is some urgency in implementing programs where children may plan, work, value and feel valuable in cooperative and supportive non-school settings.

References

Bredekamp, S. (Ed.). (1987). *Developmentally appropriate practice in early childhood programs serving children from birth through 8.* Washington, DC: National Association for the Education of Young Children.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.* Cambridge, MA: Harvard University Press.

Children's Defense Fund. (1994). *The state of America's children: Yearbook 1994.* Washington, DC: Author.

Children's Defense Fund. (1996). *The state of America's children: Yearbook 1996.* Washington, DC: Author.

Edwards, P. A., & Jones Young, L. S. (May 1992). Beyond parents: Family, community, and school involvement. Phi Delta Kappan. Reprinted in *Annual editions: Early childhood education 94/95.* Dushkin Publishing Group, 96-100.

Epstein, J. (1995). School/family/community partnerships: Caring for the children we share. *Phi Delta Kappan, 76*(9), 701-712.

Keniston, K. (1981). Three reasons why children fail. In H. Ehlers (Ed.), *Crucial issues in education* (pp. 43-45). New York: Holt, Rinehart and Winston.

Ramey, C., & Ramey, S. L. (1992). *The national head start-public school transition study.* Birmingham, AL: Civitan International Research Center.

Regional Educational Laboratories' Early Childhood Collaboration Network. (1993). *Continuity in early childhood: Elements and indicators of home, school, and community linkages.* Sausilito, CA: Far West Lab.

Stone, C. R. (1995). School/community collaboration: Comparing three initiatives. *Phi Delta Kappan, 76*(10), 794-800.

Washington, V., Johnson, V., & McCracken, J. B. (1995). *Grassroots success: Preparing schools and families for each other.* Washington, DC: National Association for the Education of Young Children, W.K. Kellogg Foundation.

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Toddler Story Hours, Poetry Concerts and Internet Access: Now Available at the Library!

Story hours for toddlers, job-readiness programs for young adolescents and computer access for 4-year-olds are but a few of the programs and services now offered at many public libraries. Too often thought of as simply warehouses for books, many public libraries today are centers for independent learning for individuals of all ages, from toddlers to senior citizens.

Public libraries are among the most autonomous institutions. Each library determines its own priorities, programming, staffing patterns, budgeting process and collection development policies. As a result, the programs and services described in this chapter may not be found in all libraries. There is no doubt, however, that something is always happening at the library! Although it is impossible to describe or even categorize the wide variety of programs currently available, this chapter will briefly review the range of services and materials available in many public libraries throughout the United States and highlight a number of innovative programs.

The Importance of Children's Services in Public Libraries

In most communities, the goal of public library service to children is to stimulate and fulfill the recreational, informational and educational needs of individuals from birth through early adolescence, focusing on provision of quality materials and services. In some areas, budget cutbacks or unusual organizational patterns result in the public library also serving as the school library. Therefore, they must provide materials to support the education curriculum. In most communities, however, the school library and public library serve complementary roles in providing a wide variety of materials and services to meet the in- and out-of-school information needs of young children and students. Although most public library collections are not specifically geared toward school subjects, they can offer a wide range of materials at all levels of difficulty to support curriculum topics. Equally important are the materials made available to meet the out-of-school and/or recreational reading and learning needs of children and early adolescents.

Children's librarians work directly with children and the adults who work with children, including teachers, school librarians, child care providers and, most often, parents. They also provide information and guidance to individuals interested in children's materials and those who need a simplified treatment of a particular subject.

Many libraries offer services beyond the library building through cooperative programs with other institutions such as schools, child care centers, community agencies and recreational facilities. Children's librarians present programs, coordinate cosponsored projects and provide materials in these settings to individuals who may not be able to physically visit the library.

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In New York, Illinois and Colorado, school, public, academic and special libraries are linked through computerized networks that enable users to request and receive materials not available in the library they customarily use. Children may take advantage of the total range of materials available at all the libraries in the area. Reciprocally, college students who need a simplified discussion of a particular subject may also access the materials in elementary school collections.

Children's services are a significant part of the learning continuum available through the public library. Many education theorists believe that lifetime learning patterns and habits are set at an early age; therefore, it is vital that young children, even infants, establish and enjoy regular library use.

Services and Programs for the Youngest Patrons

Since the early 1920s, one of the most common programming events in public libraries has been preschool story hours. Typically, mothers brought their children, ages 3-5, to the library one morning a week for a 45-minute program. The mothers generally used the time for browsing or their own reading.

Within the past 10 years, preschool story hours have changed dramatically. Recent emphasis on early development of language skills led to a significant demand for story hours for younger children. Programs designed for children from six months to three years often have long waiting lists of prospective participants. In many areas, libraries have determined that the primary audience for these programs must be the adult. Although very young children delight in the rhymes, clapping, songs and stories, the librarian actually is modeling behaviors and techniques that help parents and caregivers become the child's first teacher. Following these sessions, most libraries provide a "take along" sheet for the adults, which lists the stories, rhymes, songs and finger-plays used, so that the caregiver can repeat the stories and rhymes throughout the week to continue the literacy experiences.

At the public library in Pocatello, Idaho, a monthly program for babies up to 24 months and their parents is called "Book Babies." The program is designed to help children enhance their language development using books, and to help adults support this development. Stories, songs, finger-plays and other activities are planned for the adults and children to share during the session. The parent is then encouraged to repeat the songs and finger-plays throughout the week to reinforce the learning experience. At an initial orientation session, parents are briefed on the services offered by the library, the importance of reading to young children, how to select appropriate materials and how to share stories with toddlers. They are then encouraged to register their children for future sessions.

As more children are growing up in homes with single parents or two working parents, story hours for both toddler and preschool audiences have changed. Bedtime and Saturday morning story hours are gaining in popularity. For the bedtime sessions, parents bring children dressed in pajamas. Books for sharing at home are chosen by the parents and children before the story hour begins. As the story time progresses, the mood becomes increasingly calm and relaxed. Lullabies and "sleepy-time" stories frequently end the session and children are carried home to bed.

Many libraries are now expanding their services to child care centers and family child care homes. In some communities, children in child care centers are bused to the library for weekly or monthly story hours. In other communities, such as Patchogue, New York, the local public library brings story times and books to family child care homes. The program, titled "Working Together: The Portable Preschool Program," begins with an information session presented by the children's librarians from the Patchogue-Medford Library for local child care providers. The child care providers

then make appointments with the library staff members for monthly story times in the homes. At the time of the visit, the librarian delivers a kit of books and materials that are checked out to the caregiver. The kit is returned at the time of the next visit. The caregiver contributes to the success of the program by preparing the children for the librarian's monthly visits and by reading and sharing the materials in the kits with the children during the time between visits.

Programs for parents, either held in conjunction with story hours or independently scheduled, are popular in many libraries. In a suburban Chicago public library, monthly evening meetings featuring a pediatrician, a psychologist, a nutritionist and an early childhood specialist are presented to standing-room-only crowds. Librarians in the system prepare supplemental bibliographies and parenting materials to support the lectures.

Programs for School-Age Children

Cooperative programs sponsored by school and public libraries are increasing in number and sophistication. The Library-School Partnership Program in Boston was designed to strengthen the working relationship between the public schools and the Boston Public Library, and to increase students' knowledge and use of the public library. Public librarians made school visits to encourage students to sign up for library cards and to participate in a competition to design a billboard ad about the public library, books, readers or reading. The winning ads created by the young people were displayed on 200 outdoor billboards in the Boston area for an entire year. Library card sign-up by young customers increased by 30 percent.

At the Hall Branch of the Chicago Public Library, a mentoring program for elementary schoolboys was developed in collaboration with the Chicago Public Schools and the Chicago Children's Museum. The program, titled the "Male Mentoring/Read Aloud Program (RAP)," featured 15 high school students who spent two afternoons per week working one-on-one with elementary-aged boys in the library. They read together, and worked on homework and projects. Mentors were identified by high school teachers and trained by the library staff in reading aloud techniques and by the museum staff on developing hands-on projects. At the end of the school year, as a reward for their hard work, the children and their mentors participated in a special overnight program at the museum.

The VICTORY (Volunteers in Communities Tutoring Our Responsible Youth) Program in Austin, Texas, addresses the increasing need for one-on-one tutoring for children in both elementary and high schools. Community volunteers meet with children once or twice a week and work on tasks and goals set jointly by the tutor and the student. The tutoring program is augmented during the summer by enrichment programs to improve math and reading skills.

The Indianapolis-Marion County Indiana Public Library, in cooperation with the local Public Broadcasting affiliate, encouraged 10- to 14-year-olds to contribute to their community by serving as reading role models through televised book commercials. The young people were encouraged to "sell" their favorite books at videotaped auditions. Local PBS staff members viewed all the audition tapes and selected the 30 that demonstrated the most potential. These students then worked with library and public television staff to polish their presentations before taping. The 30 commercials aired throughout the school year during the 3:30 - 6:00 p.m. after-school broadcast period. Through this program, books and literacy were highlighted and the students had the opportunity to have their opinions recognized and valued throughout the community.

Summer reading programs are offered in most public library systems. In North Carolina, a statewide summer reading program titled "From Hatteras to Cherokee"

focused on songs, stories and games from North Carolina folklore. For each book read during the summer, the children added a "Tar Heel footprint" to a map of North Carolina. Children who read the prescribed number of books received a certificate and discount coupons for a "From Hatteras to Cherokee" week at a North Carolina amusement park.

In other programs, summer readers sign a personal contract with their children's librarian designating a specific number of books to be read during the school vacation. Children who meet their reading goals receive free tickets to baseball games, amusement parks or local zoos.

Some libraries go beyond the traditional summer reading programs to offer computer camps or job training programs. At the public library in Meriden, Connecticut, at-risk young people learned computer literacy and job preparation skills during an eight-week summer program. The students attended formal classes and then were given opportunities to use their newly developed skills by working on computers in various departments at the library and in other city agencies.

As part of the Blue Skies for Library Kids project in branches of the Chicago Public Library, young adolescents enrolled in an eight-week Job Readiness program, which included sessions on résumé writing, interviewing skills, dressing for success, work behaviors and other job-related skills. The participants then worked eight hours per week in branch libraries and made field trips to various workplaces. Successful participants in the program were honored at a commencement ceremony and received a $300 stipend.

Library Programs for Families

The "Farmington Turn-Off" was a highly successful program cosponsored by the Farmington Connecticut School Board and the Farmington Public Library. Following a discussion by the Farmington Library Council about the disturbing effect of television on children's learning, the Council decided to ask the townspeople to go without television for an entire month. In preparation for the "No-TV" project, teachers and librarians led discussions on the pros and cons of television viewing. Almost one-third of the children and adults in the village signed pledge cards agreeing not to watch television, or to severely limit their viewing, for the month of January. Special programs and reading lists were prepared by the children's librarians to fill the void left by the absence of television. Families who "turned off" during January were asked to complete questionnaires about the experience. Participants indicated that family members spent more time together reading, playing games and talking during the "No-TV" month.

A series of programs designed for families and presented by the public library in Barrington, Illinois, was titled "Summer Saturdays." Six Saturday morning sessions featured a juggling institute, a program on wildlife rehabilitation, a presentation on sharks and other programs of interest to all ages. After the presentation by the main speaker, family members were encouraged to select additional materials on the program's theme from the library's collection to share together at home.

Poetry was the focus of a series of activities sponsored by the Milwaukee Public Library, with support from the Wisconsin Arts Board and the National Endowment for the Arts. Poetry writing workshops for children directed by local poets were held over a two-week period in 30 Milwaukee area libraries. The libraries also held a "Color a Poem" session, during which children created murals based upon visual images of their poems. Following these workshops, a community poetry concert featured poems by local children and award-winning writers, enhanced by mime, music, drama and dance performed by Milwaukee arts groups. The murals created in the "Color a Poem" sessions were displayed and booklets were distributed featuring all the poems written

by children in the library workshops.

A Junior High Survival Program is sponsored annually by 11 branches of the Tucson-Pima County (Arizona) Public Library for students entering middle school or junior high and their parents. The program is cosponsored by local social services agencies that present workshops on topics that address the concerns and fears of children who are about to make the transition from elementary to secondary school. The workshops are designed to improve children's chances for success in school and at home and to reduce the likelihood of involvement in self-destructive behavior. Workshop topics include decision-making, peer pressure, friendships, time management and self-esteem. Parent workshops describe the topics covered in the student sessions and emphasize the importance of good communications within the family. At the end of the program, each participant receives a packet that includes bookmarks, a bibliography of materials about teen issues, a brochure about community agencies, homework tips and a business card from the branch youth services librarian. More than 400 young people and their parents participate in the program each year.

Computers in Libraries

Many public as well as school libraries now offer access to computers and the Internet. In Sonoma County, California, preschool children are among the most avid users. Software programs that feature letter and number games, simple logic challenges and matching activities are the most popular with this age group. Older children enjoy programs that allow the user to write a story, create a picture, compose a melody or solve a mystery. Many computer programs used by children in public libraries are educational games that require some knowledge or logic to play, and are presented in interesting, entertaining and usually colorful ways. The software generally requires more thought than an arcade game and is more fun to use than a math drill.

Access to the Internet is becoming an increasingly important research tool for many young people. Through this tool, children can get weather reports from NASA, use Civil War photographs from the Library of Congress or view artworks held by the Vatican. Access to resources is no longer limited by physical location, but now can be used electronically by young people all over the country.

In many libraries, no restrictions are placed on computer or Internet access because of age. All users are expected to possess a library card, pass a simple use test, sign a responsibility statement and stay within established time-use limits. With increasing frequency, computer access for children, as well as adults, is simply another service provided by the public library.

Conclusion

The public library today offers a wide variety of out-of-school learning opportunities, materials and services. In addition to lending books, public libraries provide reader advisory services, access to personal computers; loans of videocassettes, CD-ROMs and computer software; reading and tutoring programs; story hours and reading lists. Many libraries have an information telephone number for up-to-the-minute details on current programs and services. Some systems publish a weekly calendar of events in the local newspaper. Still others distribute a weekly or monthly newsletter.

Most children's librarians welcome suggestions from patrons. Many work closely with teachers and school librarians to coordinate public library programs with those presented in the schools. In most communities, the children's librarian serves as a valuable resource person for teachers, parents and staff in community agencies. The public library is an evolving institution committed to providing educational and recreational information, materials, program and services to individuals of all ages. All you need to do is ask!

Resources

America's children and the information superhighway. Santa Monica, CA: The Children's Partnership, 1994.

Baldwin, L. (1996). It all started in the summer . . . . *Journal of Youth Services in Libraries, 9,* 250.

Chelton, M. (Ed.). (1994). *Excellence in library services to young adults: The nation's top programs.* New York and London: American Library Association.

Dimmick, B. (1983). The microcomputer in the public library: A children's room experience. *Top of the News, 39,* 253.

Fiore, C., & McCleaf Nespeca, S. (1996). *Programming for young children, birth through age five* (ALSC Program Support Publications). New York and London: American Library Association.

Miles, B. (1995). Babies, books, and the boob tube: Preparing preschoolers to be school and reading ready and willing. *Journal of Youth Services in Libraries, 9,* 33.

Wood, J. (1996). Interagency cooperation: Benefits of intergenerational programming. *Journal of Youth Services in Libraries, 9,* 237.

The World at Their Fingertips: Children in Museums

Picture yourself floundering in a sea of 80,000 plastic balls. Or imagine yourself cloaked in pioneer garb, frying up a "mess o' " corn dodgers, black-eyed peas and salt pork over an open hearth in a smoky, dimly lit log cabin. How about spending three days at a California gold rush camp, panning for the yellow flakes that started forty-niner fever? While such experiences are no longer of the everyday variety, they *are* being experienced daily by children throughout the United States. Nor are they the result of vicarious encounters on television. They are real and direct experiences designed especially for curious children.

Children's Museums: Early Beginnings

The first children's museum enthralled Brooklyn children nearly a century ago (1899). Although similar institutions soon followed in Boston (1913), Detroit (1917), Indianapolis (1925) and Hartford (1927), it wasn't until the 1960s and 1970s that the children's museum movement truly took hold. Today, nearly 150 children's museums exist in the United States. Larger, more traditional museums of art and natural history have taken serious notice of such children's museums' success, and so have begun dedicating special exhibits and programs to young visitors. Although not specifically referred to as children's museums, many nature centers are in fact just that. Such natural science centers regularly offer programs and exhibits especially designed for children. The same is true for some of the living history museums.

Children's museums come in all shapes and sizes, with budgets ranging from barely $10,000 per year to well over $1 million. Although most museums are permanent, some operate entirely out of a mobile unit, traveling from school to school. Areas of emphasis include fine arts, natural history, cultural history, general science and many combinations thereof. As variable as children's museums appear to be, most have very similar purposes. In general, they seek to demystify the adult world, and to help children acquire or shape special skills, attitudes and knowledge concerning their world.

Children's museums strive to meet these goals by immersing young patrons in a unique, leisure/learning environment filled with multisensory, participatory exhibits. In this environment, children are keepers of the keys, masters of the locks. They are in complete control; their actions alone are responsible for any exhibit reactions. The philosophy of children's museums may be summed up by the old Chinese proverb, "I hear and I forget. I see and I remember. I do and I understand."

Play: The Basis for Children's Exhibits and Programs

Watching a child at play, one quickly notices total and active involvement. Play is a natural activity for children in nearly every culture. Education leaders like Jerome

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Bruner have documented the importance of play in the early years (Bruner, 1973; Bruner, Jolly & Sylva, 1976). Increasingly, experimental evidence of play's importance is being discovered (e.g., Zubrowski, 1984). Most, if not all, early childhood programs and exhibits in museums and nature centers place major emphasis on active play. The underlying belief is that "optimal learning in young children occurs when they play" (Pitcher, Lasher, Feinburg & Braun, 1979). Museum programs and exhibits also reflect the importance of enactive representations for young people. A sequence of steps leading to symbolic respresentations of knowledge is built through "hands-on" experiences with concrete objects. As Gage and Berliner (1979) state:

> In some ways, the subsequent kinds of understanding based on words and symbols require the earlier kinds of understanding based on both direct and internal manipulation of objects. Children who have not acquired a "feel" for the laws of the lever through playing with seesaws will have difficulties in acquiring such an understanding in their high school physics class. Children who have not played with beads, rods, and lumps of clay may have difficulties in understanding addition, subtraction, multiplication and division. (p. 156)

In addition, Piaget's and Bruner's theories of cognitive development emphasize that children's rich, experiential learning should be rooted in active and personal discovery of the world about them. The play arena, or playscape, is a creative manifestation of these ideas. Playscapes are available at the Boston and Indianapolis children's museums. Similar play arenas include Play Path in Pittsburgh, Soft Space in Los Angeles, Giant's Playroom in Rhode Island, and Infant and Toddler Room in Maine. These exhibits are essentially indoor playgrounds with carpeted stairs, ramps, peepholes and slides designed specifically for the growth and development, as well as the safety, of young children.

These play arenas function as special units where young patrons are free to engage in active, unrestrained play in both individual and social settings. Playscapes offer the opportunity for children to experience their own potential and test their abilities. They also provide a social setting in which cooperation, sharing and conflict resolution can occur—all important aspects of social learning in young children.

In conjunction with play arenas, many museums offer other opportunities for discovery learning. Some museums have water or sand tables, for example; others have exhibits in which marbles of various sizes can be rolled through an assortment of pipes. The objective in all these activity stations is to encourage children to discover simple physical principles and properties of the natural world. The marbles and pipes display enables children to note the effects of velocity, gravity and motion on objects.

Museum Programs for Children

Beyond customary school tours, children's museums and nature centers are blossoming with innovative programs and special events for young patrons. After-school programs, parent and children weekend programs, special seasonal or holiday events, and summer activities (including week-long day or overnight camps) are typical of the creative offerings at museums for children and their families.

Museum Outreach Programs. Outreach programs are widespread and popular. In these teaching experiences, museum educators and naturalists select artifacts and interesting memorabilia to share in neighborhood schools. These roving educators might bring an authentic Mexican stone metate for grinding corn, a wooden pioneer butter churn, a butterfly collection, stuffed mammals and birds, or living animals such as orphaned raccoons and rehabilitating hawks or owls. Many children's museums also rent exhibit kits to teachers, parents, children or special organizations. With these kits,

a teacher can create a mini-museum—including artifacts, crafts, posters and reading materials—in a corner of the classroom.

Programs for the Very Young: Infants and Toddlers. Museums and child-oriented nature centers are offering special programs and exhibits for the very young. Some programs are designed for children as young as 6 months of age. Parents are considered an integral part of these programs. In the play arena, for example, observation and active sharing with other parents gives families the opportunity to learn about their children's development and alternative parenting methods. Special exhibits may focus on common child-rearing problems such as temper tantrums. Frequently, these play arenas also have a resource room where adults may examine publications, kits, activities and materials that discuss parenting, child development and psychology.

At the Portland (Oregon) Children's Museum, infants between 6 and 12 months of age have a chance to participate in programs titled "Infant Play" and "Baby and Me." The Living Arts and Science Center of Lexington, Kentucky, offers similar programs for infants between the ages of 8 and 12 months. These programs permit parents to develop resource networks with others. Both the Portland Children's Museum and the Living Arts and Science Center in Kentucky offer progressively more challenging programs to meet the needs of children as they develop. Although the emphasis remains on sensory and play experiences, more organized forms of play such as games, singing and art are introduced. Parents are responsible for helping their children with materials, as well as helping them interact with others.

Kidspace in Pasadena, California, is another museum program designed for young children and their parents. Kidspace offers a special workshop, "Toys That Enhance Learning," that helps adults make wise decisions in toy selection. Experts in child development offer advice and hands-on demonstrations during other workshops. The Boston Children's Museum offers a seminar titled "Creative Experiences for Young Children." Seminar leaders share recipes, activities, games and new ideas to stimulate children's thinking.

Programs for Kindergarten and Elementary School Children. Museum programs for kindergarten and elementary school children capitalize on pupils' natural curiosity about the world around them. Most nature centers offer natural science programs on such topics as insects, pond life, seasonal changes in animal and plant life, and wildlife rehabilitation. The Exploratorium in San Francisco focuses its attention on developing children's curiosity and interest in the physical sciences. The Health Adventure of Asheville, North Carolina, is a unique facility. This museum offers programs about nutrition, dental care, bones, internal anatomy, safety and the environment. Through a variety of interactive and entertaining media—from puppets to larger-than-life plastic models—children learn how to stay healthy.

A special program at Health Adventure focuses on the issue of sexual and physical abuse. "Funny Tummy Feelings" helps children defend themselves against abuse by teaching them a variety of survival skills, including their right to say "No." Children at Health Adventure also have an opportunity to tour hospital facilities, including the emergency room, x-ray department, physical therapy room and pediatric units. By viewing the hospital in a non-crisis situation, children learn to fear it less. Twice a month, Health Adventure offers a program for parents and their children titled "My Mom's Having a Baby." Children and museum personnel discuss what happens to mothers during their pregnancy. They also work together to make gifts for their future brothers or sisters. The children also take a tour of the local hospital maternity ward and nursery.

Several children's museums (in Houston, Texas; Muncie, Indiana; Omaha, Nebraska; Portland, Oregon; Rhode Island; Maine; and Pasadena, California) encourage children to explore adult occupations through role-play. In special exhibits, children can pretend to be a banker, teacher, salesperson, doctor or nurse. In miniature supermarkets with child-sized shelves and carts, children can shop for groceries from a selection of realistic produce, meat and canned goods. Or, they can assume the role of check-out person, bagger or stock person. Those eager for adventure can don a firefighter outfit, slide down a firehouse pole, drive a fire engine and extinguish an imaginary blaze. Young ballet dancers may wear a costume and twirl to *The Nutcracker Suite.*

The children's museums of Denver, Boston and Rhode Island offer children the opportunity to experience a physical disability. The exhibits emphasize the abilities as well as the limitations of those with disabilities. Children may try on a prosthetic arm, maneuver a wheelchair around obstacles, travel blindfolded through a maze using a cane, learn to use sign language or act in a puppet show about emotional problems. Equally interesting, the Children's Museum of Omaha offers a multimedia exhibit about children's lives in Third World countries. Young patrons may participate in the "Walk a Mile in My Shoes" simulation, in which they engage in two chores most commonly performed by children of developing countries: gathering firewood and fetching water.

Museums also can help children understand and appreciate the past. The Children's Museums of Boston, Los Angeles and Rhode Island offer replicas of "Grandmother's House." These exhibits contain a Victorian parlor, kitchen and attic. Young visitors can open "Grandma's Trunk" and try on her old-fashioned gown and bonnet, or wear Grandpa's top hat and spats. Activities also include baking "from scratch"; laundering clothes with a scrub board, washtub and clothes wringer; making turn-of-the-century parlor games or listening to old-time radio programs.

Living history museums such as Old Sturbridge Village (Sturbridge, Massachusetts), Colonial Williamsburg (Williamsburg, Virginia), the Living History Farm (Des Moines, Iowa) or the Jordan-Bachman Pioneer Farm (Austin, Texas), while not strictly considered children's museums, offer numerous programs for the young. At these sites, children may learn to build a fire in the hearth of a log cabin, grind corn into meal for cracklin' cornbread, milk a cow and then churn the cream into butter, build a cedar rail fence, groom a horse, collect eggs from the hen house and plant a pioneer garden.

Making the Most of a Museum Visit

Children's museums, nature centers and general museums offer myriad delightful programs and exhibits for children. The following planning suggestions will help maximize the benefits of each visit.

Tips for Teachers and Other Group Leaders

1. Become acquainted with the museum and its programs, exhibits, printed materials and program director. If possible, visit the museum alone before taking children. Note the arrangement of the facilities to identify good gathering places for your group, restrooms, snack and lunch sites, and safety considerations.
2. Develop a theme or topic for your trip (i.e., focus your visit rather than surveying everything in the museum). Ask for helpful teacher's guides and materials. The guides often provide useful background information, as well as pre- and post-visit activities.
3. Contact the museum to schedule the visit. You may wish to arrange for a pre-visit orientation of the museum. Museum personnel will visit your group and provide a sampling of activities the children will experience at the museum. This is also a good time to stress appropriate museum behavior.

4. Plan for adequate supervision of children by adults. Have name tags for each child, and develop a plan for children if they are separated from the group.
5. Allow the children to set the pace at the museum. Plan follow-up activities to extend museum learning (see Finkelstein, Stearns and Hatcher, 1985, for suggestions).

Tips for Parents. Encourage your child to remember and discuss museum experiences. Find opportunities to extend learning. If your child is interested in the arts and crafts activities at the museum, for example, supply newsprint, poster paints and brushes. Keep in mind that you are the perfect person to extend your child's learning in non-school settings.

Tips for Museum Directors. No matter how instructionally effective exhibits and programs may be, they will remain largely underutilized by teachers if the activities are not coordinated with existing required school curricula. Therefore, it is vital for museum directors to become familiar with state and local curriculum guidelines and requirements. The Institute of Texan Cultures of San Antonio, for example, has organized many of its programs to meet Texas state curriculum requirements. This ensures greater use of the museum by children and their teachers.

Building Bridges

A successful museum program depends upon building bridges among parents, children, teachers and museum personnel. As Galper suggests (see pp. 7-11), the best approach to learning is a holistic one that involves cooperative planning among families, schools, and the formal and informal learning environments that exist in the community. Teachers and parents should serve on museum boards to provide input into exhibit and program development. Likewise, school boards should include museum directors as consultants to their curriculum committees. Museum staff may wish to initiate a needs assessment to determine the program needs of parents, teachers and children. Also, museum staff may offer community education programs or teacher inservice workshops on ways to effectively use the museum to extend basic learning. Finally, the media should be used to develop communication between the museum and the community. This may be in the form of public service announcements on radio and television, regular columns in the local newspaper, or a joint museum-school newsletter highlighting museum activities and ways for parents and teachers to extend their children's learning beyond the classroom.

The Children's Museum of Hartford, Connecticut, is a fine example of a school-museum partnership. The local school district's participation rate is 100 percent (Finch & Bilodeau, 1985). Part of the museum's budget is appropriated to cover the cost of transporting Hartford school children to the museum.

Have you had any fantasies lately? If they included floundering in a sea of 80,000 plastic balls, why not give the Children's Museum of Denver a try? Want to cook up some mouth-watering "vittles"? There's always the Pioneer Farm of Austin, Texas. Had a hankering to go panning for gold? The Oakland Museum is looking for you. In fact, an entire world of wonderful and exciting fantasies is waiting for you . . . and your children. It is just around the corner at your local museum.

References

Bruner, J. (1973). *Beyond the information given: Studies in the psychology of knowing.* New York: W. W. Norton.

Bruner, J., Jolly, A., & Sylva, K. (Eds.). (1976). *Play: Its role in development and evolution.* New York: Basic Books.

Finch, K. H., & Bilodeau, R. L. (1985). Children's museums. In R. E. Yager & J. Penick (Eds.), *Focus on excellence series, Vol. 2, No. 3. Science in non-school settings* (pp. 36-42). Washington, DC: National Science Teachers Association.

Finkelstein, J., Stearns, S., & Hatcher, B. (1985). Museums are not just for observing anymore! *Social Education, 49*, 150-54.

Gage, N. L., & Berliner, D. C. (1979). *Educational psychology* (2nd ed.). Boston: Houghton Mifflin.

Pitcher, E. G., Lasher, M. G., Feinburg, S. G., & Braun, L.A. (Eds.). (1979). *Helping young children learn* (3rd ed.). Columbus, OH: Charles E. Merrill.

Zubrowski, B. (1984). Of cabbages, science curriculums and children's learning. *Science Education, 68*, 589-93.

Zoos Aren't Like They Used To Be: They Are Better!

The underlying concept of zoological parks, or "zoos," has evolved in recent decades. Zoos were once seen exclusively as public attractions where families and school groups could take leisurely warm-weather outings to see animals that they might never see elsewhere. As long as this remained the central function of zoos, a number of groups opposed the entire notion. Through the first half of this century, most environmentalists and animal rights activists felt that many, if not all, zoos exploited animals by supporting and encouraging the capture of species in the wild, forcibly removing animals from their natural environment, and confining them for public display. In many instances, animal advocates argued that animals were not even given proper food and care, and that they should not be kept in captivity even in the best of situations.

Modern zoos provide more consistently for adequate care of animals. In fact, the argument could be made that most species fare far better in zoos than they would in the wild. Furthermore, zoos are responsible for the preservation of many animal species. Animals on the brink of extinction are studied and bred. Species that otherwise would have disappeared long ago are still living. Animals that would be starving in the wild due to human destruction of their environment and their food sources, receive the best of food and veterinary care in zoos.

Today's zoos re-create natural habitats. Designers make every attempt to give animals homes very much like those that they would have in the wild. The carefully designed habitats may include indigenous vegetation, secluded hiding places and specially controlled lighting that simulates the animals' natural environments. Prime examples are the tropical rain forest at the San Diego Zoo and the Gorilla Walk at the Cincinnati Zoo.

Modern zoo design also accommodates animals' natural shyness. People view expansive animal habitats from trams or elevated walkways, rather than staring at animals in small cages. Many animal observation buildings have subdued lighting or even black light to more closely imitate the natural conditions of the animals' waking habitat.

Zoos remain major attractions for tourists and locals, and many are famous as such. In many major cities, no family visit is complete without a trip to the zoo. In response, zoos are enforcing and expanding their role as places of learning for children and adults.

Zoos also provide a showcase for more playful, less shy animals who seem to be performers by nature. Many of these animals relate well to a human audience, and others ignore observers as long as they are left alone. Zoos have become more and more creative about involving the public without making the animals fearful. Some parts of animal nurseries have observation windows so that people can watch baby animals feed and play. Such windows are also built beneath the water level of aquatic tanks, allowing children and adults to watch playful walruses, seals and even otters. Petting zoos give urban children the opportunity to touch and feed many domestic,

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and even some wild, animals that have overcome their timidity.

The purpose of this chapter is threefold: to identify and describe the educational opportunities available through zoological parks, to suggest ways in which experiences can be structured to reinforce basic skills and concepts through zoo visits, and to help educators and parents identify exemplary zoo facilities and programs in their area.

Educational Opportunities at Zoological Parks

Zoo facilities vary. Many of the larger zoos, like the San Antonio Zoological Gardens and Aquarium, the Lincoln Park Zoo in Chicago and the Los Angeles Zoo, house a broad spectrum of animals. Other zoos are more specialized. Some have far more extensive representation of particular kinds of animals (e.g., felines). Others specialize in animals from a particular area of the world, such as the collection at the Arizona-Sonora Desert Museum. Also, specialized facilities in some zoos provide unique environments. Marine parks and aquariums, such as Sea World of Florida and the John Shedd Aquarium of Chicago, are representative of specialized environments in which particular types of aquatic life are the sole focus.

The number and size of education programs zoos can offer are limited by that particular park's resources and facilities. Most zoos do offer programs throughout the year. In large cities, such as Los Angeles and Chicago, a "zoomobile" takes live animals to community centers and schools. A docent or guide accompanies the animals and provides students with timely information about the animals' habits and nature. Also, docents in many communities provide pre-visit zoo orientation programs that are designed to prepare students for a successful zoo trip (Moscu & Murphy, 1980). Zoos are also beginning to provide more and more orientation packets for school groups that will be visiting the zoos. These materials, sometimes available at a nominal cost, may include preparation activities, research projects and fun activities to do during and after the zoo visit. They also may provide many helpful hints and "do's and don'ts," including safety tips for making the visit enjoyable from start to finish.

Zoological parks also conduct on-site seminars, workshops and summer camps. These programs use a variety of instructional approaches, including computer activities, puppet shows, films, slides, crafts, games and songs. The presentations not only deal with animals in the zoo, but also focus on respecting and caring about the animal world in general.

Another illustration of the broad spectrum of zoo efforts is the San Diego Zoo's "Zoo Creepers." This program features tactile experiences with reptiles, certainly a step beyond most petting zoos. Programs in zoos across the United States teach children about animals' survival techniques. Other programs stress survival and safety lessons for children as they come into contact with animals. In addition, zoos such as North Carolina's Zoological Park at Asheboro offer special workshops and material for teachers (Moscu & Murphy, 1980). These are only a few of the creative outreach programs that zoological parks offer children, their families and teachers.

Zoo Study in the Classroom

Educators and parents can capitalize on children's keen interest in animals to extend basic skills and concepts. The zoo might be made a school theme for a month or even an entire year, with thematic units based around animal conservation, preserving animal habitats, the animals of different places in the world, zoos of the world and other topics. The highlight of the theme period could be a prepared visit to the zoo. Extensive follow-up activities could include a day in which the entire school is turned into a simulated zoo (different classes could build exhibits and the children may give visitors illustrated tours). The following strategies are designed to reinforce reading, written

and oral language, and mapping skills, and to support holistic learning of concepts. Most of them could be used as part of the thematic unit approach or simply as independent learning experiences.

Strategy I. Planning a Zoo. What determines the best locations for sites, animals and facilities? Who decides where different exhibits are located? How much space do different animals need? Are there some animals that cannot be placed near other animals? How are zoos changing and how far in advance are changes planned? How are computers changing zoos and zoo learning?

Local zoo people can help children understand that many of these questions and others need to be answered when planning a zoo. A talk by zoo personnel can help children create their own zoo plans in a number of ways. That planning can evolve into maps of the children's ideas of real or imaginary zoos done either in groups or as individual projects. Floor and table models of a zoo can also be constructed. Students may even work from aerial photographs of a zoo to create a model. They can make lists of factors to consider in zoological park design. To make the activity even more imaginative, try incorporating a reading of Dr. Seuss's *If I Ran the Zoo* as a catalyst to children's creativity.

Strategy II. Animals Around the World. As preparation for a real zoo visit, have children look at a world map. While at the zoo they can list a specified number of animals that they see, and note the geographic areas in which each animal's native habitat is found. Elements such as animal adaptation, protective coloring and other physical features that enable the animal to survive in particular climates and environments might also be identified. This provides children with clues to understanding the people of a locale and how both individuals and animals have adapted to their surroundings. To follow up the visit, have the children work on a large wall map of the world and place animal names or pictures in the areas to which they are native.

Strategy III. Zoo Lists. Listing builds fluency and flexibility of thinking. One simple use of a listing activity is for children to make lists of the animals that they see at the zoo and then write each different animal's name on a separate card. Depending on the age of the children, differing amounts of aid and hints can be given by the teacher (including animal pictures on the cards). The children can then sort the cards into categories (e.g., color, size, skin covering, diet, type).

Other listing activities include:

- ways to make animals happier (or safer)
- ideas for making the zoo more fun
- funny animal combinations
- animals that make us laugh
- zoo do's and don'ts.

Strategy IV. Zoo Help. Children need to have an active interest in helping the zoo (or zoos) nearest to them. Several kinds of activities can benefit both children and the zoos:

- Have the children, as a class, write to the local zoo asking what kind of things that they can do to help the zoo. Some zoos may offer extensive community involvement programs or even school-focused programs.
- Have the children write letters to the newspaper explaining why their zoo is so great and why they like it.

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- Get the school to sponsor a zoo fundraiser. This can even be designed so that the funds are divided between the zoo and the school. Part of the activity can include writing a press release about the fundraiser, and following up with calls to newspapers and radio and television stations. The activity may attract favorable publicity for both the school and the zoo.

Strategy V. Three-Dimensional Walk-Through Maps of the Zoo. Young children will enjoy this activity. Use a map of the nearest zoo as a model. The classroom or gym floor may serve as the place for the "walk-through map." Children and parents should be involved in map construction. Any number of details can be added—shoe box cages, desk and tabletop "environments," toy animals, animal pictures, dioramas, animal pens and signs. After the walk-through map is completed, students may practice guided tours of their zoo in preparation for their own visit or that of another class. This may also be a follow-up experience if pupils have toured the facility. This activity strengthens pupils' spatial understanding and provides opportunities to practice new vocabulary such as "habitat" and "endangered."

Strategy VI. Exhibits at the Zoo. These are projects for older children. Designing and creating models of their own zoo exhibit will lead children to think about how zoos are planned and arranged. They could do these models in blueprint or map style, and present them in a "sales approach" that shows their advantages to animals and visitors.

Strategy VII. Creative Writing About the Zoo. A visit to the zoo will stimulate creative writing activities for children of all ages. Writing topics might include: The Most Interesting (best, funniest, happiest, most unusual, strongest) Animals in the Zoo; The Kind of Zoo I Would Like; What It Would Be Like To Work in a Zoo; If Animals Could Talk. If the class has an Internet Home Page, children may report on their school visit there. They can also write scripts for skits and plays, or narration for silent videotapes and slide shows about zoo experiences. Younger pupils may write language experience stories and charts, as well as individual booklets about their visit.

Additional study skills for older pupils can be reinforced through written and oral reports on topics such as the history of a zoo, how to care for a particular animal and how new animals are found and obtained for the zoo. Information can be found in newspaper articles, zoo magazines and books, trade books about animals (such as those listed at the end of this article) and local histories and discussions with zoo curators.

Other writing possibilities include:

- Children writing animal fables about how different animals got their features (e.g., How the zebra got its stripes or the leopard its spots; how the platypus got its webbed feet and bill; why some rattlesnakes have diamond markings).
- Children writing thematic concrete poems about a particular animal in the shape of that animal.
- Two children carrying on a correspondence as though they were two animals in two different zoos writing to each other.
- Children creating stories from the animals' perspectives about animals being captured and sent to a zoo.
- Children writing about the zookeeper's most interesting or unusual or worst day.
- Children creating adventures of an animal that escaped from or to a zoo.

Strategy VIII. Animal Mock Trial. For older pupils, this activity promotes study and research skills and lends itself to dramatic enactment. The class must select an

animal from among predators and creatures considered as "pests," or as dangerous or destructive. Children must read extensively about the animal, determining its strengths and weaknesses. Select children to serve as defense attorneys and character witnesses for the creature as they demonstrate that the animal is either falsely accused or justified in its actions. Also identify prosecuting attorneys and witnesses to focus on the animal's destructive qualities. Student jurors must weigh the evidence and render a verdict.

Strategy IX. Action for an Endangered Species. Children's natural fascination with animals can make zoos and their inhabitants an excellent resource for long-term projects. For example, children can become involved in the environmental protection and preservation of an endangered species. Pupils can discuss ways in which a species may be threatened with extinction and how to remove the dangers. Children can learn how animals are endangered by humans who hunt and trap them for sport or profit (e.g., American bison, whale), attempt to destroy them intentionally (e.g., wolf, mountain lion, jaguar), and ravage or change their natural habitat and environment (e.g., African elephant). Children will enjoy projects that illustrate the plight of these animals, such as making animal dioramas, environmental murals, and animal posters, collages and mobiles. Younger children will benefit from animal pantomimes and puppet shows. Children can use these strategies to make the public aware of a particular animal's preservation needs. Older children may also write letters to legislators, as well as animal rights and animal protection groups advocating their own views.

Strategy X. "Adopt an Animal." Many zoos have programs in which individuals and groups can "adopt" an animal and pay for its upkeep. In undertaking this project, children will reinforce math skills as they investigate the cost of feeding different animals. Students can then determine fundraising activities to pay for the sponsorship. This activity gives children a sense of community spirit and pride as they cooperate in activities to raise funds for their "adopted" zoo friend. Zoos will often display a plaque recognizing animal sponsors, giving the children a sense of personal accomplishment and civic responsibility when they visit.

The following activities will provide older pupils with opportunities to locate and identify specific information about animals, and to sharpen their observational and critical thinking skills. Students may obtain this information while touring the zoo or during classroom follow-up activities.

Strategy XI. Zoo Scavenger Hunt. While they are at the zoo, have children locate and name a creature that fits each of the following descriptions. There may be more than one correct answer.

Name and Location of the Zoo _____

_____ An animal that catches its prey by stealth.
_____ An animal that uses its tail for balance.
_____ A creature that has food imported from another country.
_____ A bird that eats insects.
_____ An animal that can rotate its head 180 degrees.
_____ An animal that sleeps in the daytime.
_____ An animal that is an endangered species.
_____ An animal with feet suited to digging.
_____ An animal that mates only once in its lifetime.

Strategy XII. Zoo Library Hunt. Have students use reference books in the library to find answers to questions such as those below:

_____ Name a species that has been saved by zoos.
_____ When and where was the first zoological park in the United States?
_____ Name an animal that has not been successfully bred in captivity.
_____ Identify an animal that was once in danger of being extinct but is no longer endangered.
_____ Name an animal that has become extinct in the last 10 years.

Have students use an unabridged dictionary to find the origin of the animal names. The origin of the following names are interesting:

hippopotamus	capuchin monkey
wolverine	alligator
rhinoceros	bald eagle
bison	dromedary.

Strategy XIII. Animal Web. Have each child or group of children make an "animal web." The name or an illustration of an animal is placed in a small circle on a paper. (There can be as many different animals as there are children or groups.) As students see other animals that are similar to the one in their inner circle, they add another circle, name that animal and draw a line connecting it to the first circle.

Strategy XIV. Creative Drama Ideas.

- Have each child choose an animal, observe its movements and then act them out. Other children must guess the animal's name.
- Let children experiment with making different animal sounds.
- Have pairs of children play out a meeting between two animals of either the same or different species to show how the animals would act.
- Have children plan and act out the capture of an animal in the wild.
- Children might stage a zoo quiz show, creating questions to use their knowledge of zoos.
- Children can make paper bag puppets of zoo animals and then do improvisations in which the animals have conversations about life in the zoo. They could talk about their feeding, the people who come to see them, and other day-to-day activities, for example. They could also stage conversations between animals who were born in the zoo and those captured in the wild.
- Have children videotape a real or imagined visit to the zoo, with different children serving as tour guides.
- Children can act out different poems about animals.

Conclusion

Zoos have always been places where individuals could understand and observe animals from their own locale and other areas of the world. They have served as laboratories to study animals and their environments. They have preserved species whose numbers were decreasing or in danger of extinction. Now, best of all, they are even more inviting and interesting because they offer specially designed programs for children, their families and teachers. No, zoos are "not like they used to be"—they are better!

Exemplary Zoological Parks and Aquariums

The American Association of Zoological Parks and Aquariums is an accreditation agency whose goal is to improve zoological parks and their educational opportunities. The following institutions meet the high standards of AAZPA accreditation (Boyd, 1985).

ALABAMA
- Birmingham Zoo

ARIZONA
- Arizona-Sonora Desert Museum, Tucson
- Gene Reid Zoological Park, Tucson
- Phoenix Zoo

CALIFORNIA
- Living Desert Reserve, Palm Desert
- Los Angeles Zoo
- Marine World Africa USA, Redwood City
- Roeding Park Zoo, Fresno
- Sacramento Zoo
- San Diego Wild Animal Park
- San Diego Zoo
- San Francisco Zoological Gardens
- Santa Barbara Zoological Gardens
- Sea World of San Diego

COLORADO
- Cheyenne Mountain Zoological Park, Colorado Springs
- Denver Zoological Gardens

DISTRICT OF COLUMBIA
- National Zoological Park

FLORIDA
- Sea World, Orlando
- Discovery Island, Bueno Vista

HAWAII
- Waikiki Aquarium

ILLINOIS
- Glen Oak Zoo, Peoria
- Lincoln Park Zoological Gardens, Chicago
- Miller Park Zoo, Bloomington
- John G. Shedd Aquarium, Chicago

INDIANA
- Fort Wayne Children's Zoo
- Indianapolis Zoo

KANSAS
- Sedwick County Zoo, Wichita
- Topeka Zoological Park

KENTUCKY
- Louisville Zoological Garden

LOUISIANA
- Greater Baton Rouge Zoo
- Audubon Park and Zoological Garden, New Orleans

MARYLAND
- Baltimore Zoo
- Salisbury Zoological Park

MASSACHUSETTS
- New England Aquarium, Boston

MICHIGAN
- Binder Park Zoo, Battle Creek
- John Ball Zoological Gardens, Grand Rapids

MINNESOTA
- Minnesota Zoological Garden, Apple Valley

MISSOURI
- St. Louis Zoological Park

NEBRASKA
- Henry Dooley Zoo, Omaha

NEW MEXICO
- Rio Grande Zoological Park, Albuquerque

NEW YORK
- New York Zoological Park, New York City
- Buffalo Zoological Gardens
- Seneca Park Zoo, Rochester

OHIO
- Cincinnati Zoo
- Cleveland MetroParks Zoo
- Columbus Zoological Gardens
- Kings Island Wild Animal Habitat
- Sea World, Aurora
- Toledo Zoological Gardens

OKLAHOMA
- Oklahoma City Zoo
- Tulsa Zoological Park

OREGON
- Washington Park Zoo, Portland

PENNSYLVANIA
- Philadelphia Zoological Garden
- Zooamerica at Hershey Park, Hershey

SOUTH CAROLINA
- Brookgreen Gardens, Murells Inlet
- Riverbanks Zoological Park, Columbia

TENNESSEE
- Knoxville Zoological Park
- Memphis Zoological Gardens and Aquarium

TEXAS
- El Paso Zoological Park
- Ellen Trout Zoo, Lufkin
- Fort Worth Zoological Park
- Gladys Porter Zoo, Brownsville
- San Antonio Zoological Gardens and Aquarium

UTAH
- Hogle Zoological Gardens, Salt Lake City

WASHINGTON
- Point Defiance Zoo and Aquarium, Tacoma
- Seattle Aquarium
- Woodland Park Zoological Gardens, Seattle

WISCONSIN
- Henry Vilas Park Zoo, Madison
- Milwaukee County Zoological Gardens

CANADA
- Calgary Zoo, Alberta
- Metropolitan Toronto Zoo, Ontario
- Vancouver Public Aquarium, British Columbia

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Books About Zoos and Zoo Animals

Bahr, R. (1982). *Blizzard at the zoo.* New York: Lothrop.

Benjamin, A. (1994). *Zoo doings.* New York: Simon and Schuster Children's Books.

Benjamin, A. (1994). *Zoo numbers.* New York: Simon and Schuster Children's Books.

Bloch, C. (1993). *Zoo animal sticker atlas.* New York: Nickel Press.

Bostock, S. S. (1993). *Zoos and animal rights: The ethics of keeping animals.* New York: Routledge.

Brown, A. (1993). *Zoo.* New York: Knopf Books for Young Readers.

Cortright, S. (1990). *Zoo animals.* Hauppauge, NY: Barron's Educational Series.

Dr. Suess. (1950). *If I ran the zoo.* New York: Random House.

Fowler, M. (1993). *Zoo and wild animal medicine* (3rd ed.). New York: Saunders.

Gerstenfeld, S. L. (1993). *Zoo clues: Making the most of your visit to the zoo.* New York: Puffin Books.

Gibbons, G. (1987). *Zoo.* New York: Crowell Jr. Books.

Harding, J. (1992). *Zoo: First readers* (Series 929). Dallas: Ladybird Books.

Hill, J. (1995). *Zoo alphabet book.* New York: Hill Associates.

Irvine, J. (1994). *Zoo's who: Babies.* New York: Simon and Schuster.

Jacobsen, K. (1982). *Zoos.* Chicago: Children's Press.

Maple, T., & Archibald, E. (1992). *Zoo man: Inside the zoo revolution.* Longstreet Press, Inc.

Musinger, L. (1992). *Zooful of animals.* Boston: Houghton Mifflin.

Oana, K. (1984). *Zoo fun book.* Akron, OH: Carson-Dellosa Publishers.

O'Neill, S. (1991). *Zoo babies.* New York: Random, Villard Books.

Prelutsky, J. (1983). *Zoo doings: Animal poems.* New York: Greenwillow.

Quinn, K. (1991). *Zoo animals* (Facts and fun book). Los Angeles: Price-Stern.

Richmond, G. (1989). *Zookeeper looks at bears.* Irving, TX: Word, Inc.

Richmond, G. (1989). *Zookeeper looks at elephants.* Irving, TX: Word, Inc.

Richmond, G. (1989). *Zookeeper looks at mother and baby animals.* Irving, TX: Word, Inc.

Richmond, G. (1991). *Zookeeper looks at big and little animals.* Irving, TX: Word, Inc.

Richmond, G. (1991). *Zookeeper looks at big cats.* Irving, TX: Word, Inc.

Richmond, G. (1991). *Zookeeper looks at monkeys.* Irving, TX: Word, Inc.

Rienkowski, J. (1985). *Zoo.* New York: W.S. Heineman (David & Charles).

Rinard, J. E. (1981). *Zoos without cages.* Washington, DC: National Geographic Society.

Robinson, M. (1994). *Zoo at night.* New York: Simon & Schuster Children's Books.

Robinson, M., & Chandler, D. (1995). *Zoo animals: A Smithsonian guide.* New York: Macmillan.

San Diego Picture Books (8 volumes). San Diego Zoo series.

Songren, S. (1981). *What's for lunch: Animal feeding at the zoo.* New York: GMG Publishers.

Spinelli, E. (1992). *Zoo animals.* New York: Children's Nature Library.

Stamper, J. B. (1989). *Zoo worker.* New York: Troll Associates.

Tremper, A., & Diepert, L. (1982). *What's new at the zoo kangaroo?* Carthage, IL: Good Apple.

Yancy, D. (1995). *Zoos.* San Diego: Lucent Books.

Zoo: Hidden pictures coloring book. (1987). Los Angeles: Price-Stern.

Internet Sites (A Sampling)

VA ZOO - Family Education Programs

Family educational programs at the Virginia Zoo. Summer Safari Day Camp, 1996. They offer full-day camps for children entering 1st through 6th grade.

http://www.communitylink.org/vazoo/education.html

Memphis Zoo Education
Education. General zoo information. Special exhibits of interest to children. Discovery center. "Once Upon a Farm." School group rates. Tips.
http://www.memphiszoo.org/educatn.html

Rio Grande Zoological Park
Zoo education. Free programs. "Local Zoo To You." Albuquerque-area programs geared to K-12 students that feature slides, biofacts and education.
http://www.nmia.com/~skshowa/zoo/text/zooed.html

Utica Zoo Education
Education and volunteer opportunities. The zoo offers educational programming to people of all ages. Slides, films, live animals, artifacts and biofacts.
http://www.cybervillage.com/uticazoo/education.htm

San Francisco Zoo HomePage/Education Programs
Education programs. The Zoological Society's education department and its 140 active docent volunteers give guided tours of the zoo and operate the ZooMobile.
http://www.sfzoo.com/html/edu.html

Adelaide Zoo Education Service
Contents updated 12th February, 1996. Adelaide Zoo Education Service.
http://www.saschools.edu.au/open_acc/oes/azg/az_intro.htm

Pittsburgh Zoo—Education Department
The new education complex with five classrooms available. The education department is dedicated to instructing students of all ages.
http://keyselections.lm.com/education.html

References and Resources

American Association of Zoological Parks and Aquariums. (1993). *Zoos and aquariums of the Americas.* Wheeling, WV: Author.

American Association of Zoological Parks and Aquariums. (1977). *Public education in zoos and aquariums.* Wheeling, WV: Author.

Boyd, L. J. (Ed.). (1995). *Zoological parks and aquariums in the Americas.* Wheeling, WV: American Association of Zoological Parks and Aquariums.

Moscu, C. A., & Murphy, P. A. (1980). *Education's directory of the American Association of Zoological Parks.* Wheeling, WV: American Association of Zoological Parks.

Learning About Work: Extending Learning Through an Ecological Approach

An ecological view of learning suggests that children acquire ideas from all facets of their environment. What occurs in children's surroundings influences how they function (Bronfenbrenner, 1979). Children are naturally inquisitive and seek to experience learning and their development holistically; for example, they use all of their senses in processing new events and activities. In effect, learning is a sociocultural process in which children attempt to gain an ever-increasing understanding of the environment.

While children initially rely on their family learning setting for stimulation and access to various learning activities, they eventually seek wider circles to investigate. Family, school and community provide many possibilities for children to examine and learn about their world. This chapter will focus on how children can learn about the world of work through experiences in various social contexts.

Children's Conceptions of Work in a Changing Society

It is estimated that 60 percent of current jobs eventually will be eliminated or drastically altered through new technologies (Wirth, 1993). Economists expect that most people will change jobs or careers at least four or five times during their lives. This expected transformation of the economy and our workplaces means that today's children must construct more flexible and adaptive images of the nature of work and their creative participation in it. Their experiences with existing and emerging work roles and contexts need to be richer and more encompassing than those of prior generations (Clinchy, 1995).

Children must develop an understanding of the natural connections among work, family and community, as well as the significant role that education plays in all of these endeavors. The fact that "work" occurs in multiple contexts and in varied roles—family, parenting, learning, producing, school and community enhancement—is a vital construct for children's understanding of the meaning of work (Clinchy, 1995).

The Natural Contexts of Work: Family, School and Community

Bronfenbrenner (1979, 1986) cautions that today's children are too often isolated from the ecological contexts that enable them to develop healthy precepts of work. How parents and other significant adults "represent" their work experiences can help children organize a valid and sensitive understanding of it (Swick, 1988).

Family. While the family ecology is rarely seen as a place of work, it is one of the most important and functional workplaces children encounter. Parents and other family members informally introduce children to many work roles and tasks: nurturing each other, preparing food, managing the home, learning the art of cooperation and compromise, solving problems and negotiating the family-workplace match. In many

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cases, parents extend this process by including children in activities like shopping, cleaning, working in the yard, visiting workplaces and learning about the community. These extending experiences help children see that work occurs in all aspects of life and that it is an integral part of family life. In essence, they see work demonstrated, and they have opportunities to participate in it. This integrated schema of work and family is too often missing in the lives of many people (Kamerman & Hayes, 1982).

School. Children spend most of their young lives in school and yet rarely come to see the school-work connection. Work is all around children within the classroom. Their own play and work can help to shape their understanding of their role in the family, school and community (Bronfenbrenner, 1986). As a starting point, teachers can connect children with their peers in tutoring and mentoring activities that expand their understanding of work as a mutually enhancing process. This play/work scenario is further developed as children share hobbies, talents, leadership skills, and interests in music, crafts, athletics, academics and the creative arts (Swick, 1988).

Another valuable resource to extend children's concept of work is for teachers to share skills and talents across the school and the school system. Swick (1988) notes some of the value of this approach:

> Teachers from various content areas share a special project that is appropriate to the children. For example: home economics teachers could do a lesson on making cookies, science teachers on rocketing or animals, health teachers on nutrition, and social studies teachers on community living. Everyone benefits from such involvement: children experienc[e] the caring and expertise of other important adults, teacher-contributors meet their future students and gain the benefits of "teaming" with one of their peers, and the classroom teacher has a chance to see the children in action with another teacher. (p. 76)

Community. It is important for children to see that "work" is what makes a community possible. Children's direct experiences with adults and their environments provide them with meaningful concrete understanding of work. Field trips to a restaurant, the post office, a factory, the utility company, city hall and various retail stores place children in authentic work environments. These experiences provide children with firsthand knowledge of work and responsible workers. Guest speakers can also be resources when field trips are not feasible. Audiovisual materials about the uses of technology in work settings and family living are also useful. Furthermore, community study can link these real-life activities to classroom learning. For example, the author used a school and its surrounding neighborhood as a way to show middle school students how people meet their needs. The ways to help children construct authentic images of their relationship to the environment are limitless (Swick, 1988).

Extending and Enriching: The Early Years

The early childhood years provide the most sensitive period for children to gain new perspectives and knowledge. Learning about work through real experiences, role-playing and interactions with capable adults is the best means for promoting children's growth. Swick (1988) summarizes the important elements of early learning:

> For children to make sense of their world and to discover their place in it requires a broad range of real life experiences. Reading a story about fire trucks is an excellent way to expand a child's vocabulary and help [children] to organize their thinking; however, that child needs varying and continuous experiences with fire trucks in order to construct an image of what it is, what it does, and how it influences his life. Books and other language related experiences are extremely valuable—especially when they are connected to real, sensory experiences. Real experiences provide the excitement, interest, and motivation, and classroom experiences provide the synthesis and integration of these experiences into meaningful patterns of human behavior. (p. 74)

Communities offer multiple opportunities to extend and enrich children's conceptions of work. Learning to take care of the environment is a priority for today's children and an inviting place to connect work and human functioning. Judith Singer (1992) describes a unit on rain forests she used with young children to increase their knowledge of and sensitivity to the responsible care of our earth. Using a combination of local resources, like visits to parks and the creation of a rain forest museum, she engaged children in the work of caring for the environment. She summarizes what the children learned from these experiences:

> While the children learned that people all over the world depend on the rainforests, they discovered that they depended on each other to create a rainforest in their own school. They saw their parents and other adults helping them take care of their park, so they could feel safe there again. They learned that we depend on each other to take care of our world: people, parks, and rainforests. (p. 274)

Additional possibilities for learning about work include visits to local human service and artistic centers. Swick (1987) shares two such possibilities:

> 1) A visit to a veterinary clinic can introduce children to the concepts of basic animal health care, preventive approaches to animal illnesses, signs of illness, precautions to take in relating to animals and the responsibilities involved in caring for animals. This experience not only contributes to the child's cognitive learning but also introduces the child to a specific form of community responsibility and caring (Reed, 1980).
>
> 2) Community theatrical centers provide a natural setting to expand the child's concept of art, theater, and music. For example, the Taft Museum of the Arts in Cincinnati, Ohio, offers educational activities for children and also sponsors a visiting "Artists-in-the-School Program" (Silver, 1978). Through these art awareness experiences, children's ideas of art are broadened and their concepts of play/work are strengthened. (p. 34)

Integration of these experiences in the curriculum enhances children's total development. Role-playing, language stories, hands-on science, field trips and computer-assisted learning provide children with enriching experiences. To the untrained observer, all this energy to extend children's learning may seem unnecessary. This form of learning is important, however, if children are to comprehend what they have observed, read and discussed. As Hymes (1981) notes, children who are isolated, hurried into "empty" child care centers or processed through sterile, one-dimensional programs will lack the foundation for understanding their world to the fullest (Hymes, 1981).

Exploring and Creating: The Middle Years

During the middle and later childhood years, children seek to expand their understanding of work and careers through diverse experiences. Of particular importance to students is the meaningful use of their talents. Through a combination of exploratory activities and hands-on experiences, students in middle and later childhood can broaden their concepts of work and develop further insights into the school-work connection (Swick, 1987). For example, schools may develop cooperative programs with local fine arts groups. Through community resource sharing, many children can explore their musical, dramatic or artistic interests in a way that might not be possible otherwise. School-community collaboration can increase the options for more student involvement in the arts (Danzberger & Usden, 1984). Company sponsorship of musical instruments for children whose parents are unable to pay for expensive instruments is one such possibility. Community-sponsored arts festivals that feature children's work can be another valuable experience.

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Learning about the natural relationship between care of the environment and human functioning provides an important extension of student understanding. The caring dimension of work can be highlighted through concrete activities. Elizabeth Cole (1992) describes a creative recycling activity she carried out in the classroom:

> The purpose of the paper recycling activity was to show students how nature can be conserved by reusing discarded materials. First, we collected and saved paper scraps and then turned them back into pulp for paper making. The children, ages 5 to 11, began by separating paper by color. Next, they tore the pages into small pieces and placed them into buckets of water to soften the fibers. With the teachers' assistance, the children created pulp by putting the soaked paper into blenders to break down the fibers into a creamy consistency. As a final step in the pulping process, the liquidized [sic] paper was strained to remove excess water and squeezed into hand-sized bundles. (p. 286)

She further explains that the children pressed the pulp into sheets they would later use to make books. Finding new ways to recycle and protect the environment is a valuable lesson for students as they develop their precepts of the world of work.

Learning through active involvement can be further extended via cooperative school-business partnerships. Resource teachers from business and industry can enrich student concepts of work in ways that connect work, education and life. The New York City Board of Education and the New York University School of Medicine developed one such cooperative program in which children experience science at the medical center. Also, center faculty serve as resource teachers in the schools (Swick, 1982). Similar arrangements have been established by computer and high-technology firms. Tango (1985) describes a program in Boston in which an "Adopt-a-School Program" plays a creative role in bridging the gap between school and work. In this program, an individual school is "adopted" by a local business, and it receives valuable support in accomplishing school objectives. Support takes many forms: employee-provided instruction, computer equipment, staff training, mentors and video technology.

Public-private partnerships empower students to develop broader school-to-work understandings. A recent ERIC Digest (*School-to-Work Transition: Its Role in Achieving Universal Literacy*, 1991) describes this evolving strategy:

> Both the Edna McConnell Clark Foundation (Lacey and Kingsley, 1988; Lefowits, Kingsley, and Hahn, 1987) and the National Alliance of Business (NAB, 1989) have been involved in fostering work-education partnerships in a number of cities throughout the country. Designed to bring an array of public and private resources to bear on the transition from school to work, both the Edna McConnell Clark Foundation and the NAB projects sought to form and sustain alliances among groups of employees rather than individual firms, school systems rather than single schools, and combinations of governmental and private funding rather than a single source. (p. 2)

"Shadow programs" used by some schools integrate school and work into meaningful experiences for students. Typical shadow programs in middle school combine study of a career with site visits to a local business or industry, where real life observation and participation add an element of reality to learning (Wonacott, 1992). As an extension activity, students share what they learned with others and write a job description for use in a class careers portfolio.

Planning and Experiencing: Adolescence and Young Adulthood

Erikson (1982) noted that adolescence and young adulthood are periods of stress for youngsters as they form an identity that is consonant with self and community. In times of dramatic economic change, the task of developing competence for the world of work is especially complex and stressful for youngsters. In contrast to the industrial

model of work, where mass production and minimal skills might suffice, the evolving information and technology of global economies require new levels of creativity (Wirth, 1993). Invention, information development, systems thinking, collaboration and inquiry are the key attributes of emerging social and economic system. In effect, today's youth face an economy and society where work is constantly changing; therefore, the skills needed to adapt are continually evolving. The skills for living and working are forever linked with lifelong learning (Hartoonian & Van Scotter, 1996).

School and business/industry can develop partnerships in which students gain needed inquiry and application skills for this changing context. The substance of these partnerships should include:

- School and work experiences that strengthen student's development of self-knowledge, interpersonal skills, and their total growth and development
- Exploratory activities that allow students to study the relationship between learning and work, gain career information skills, acquire job-seeking skills and become sensitive to the nature of change as it occurs in work contexts
- Career development experiences that introduce students to career planning, decision-making, adapting to change and involvement in meaningful work experiences. (Miller, 1992)

Strengthening Students' Self-Development. High school curricula should include significant experiences in which students engage in personal development. This might include self-assessment, increased understanding of one's personal goals, opportunities to acquire and refine interpersonal skills, collaborative teamwork and attention to one's personal growth.

Exploring the Learning-Work Relationship. In this stage of development, students should explore the connections between work and learning (Wonacott, 1992). Studying and visiting workplaces, examining careers, learning about job skills, role-playing interviews, and discussing work skills required for the future are valuable experiences for adolescents and young adults (Hartoonian & Van Scotter, 1996).

Planning for Work/Career Involvement. Students need school experiences that involve them in planning for and experimenting with work skills and career possibilities (Wirth, 1993). School-to-Work programs should link school learning to career requirements, develop a student's personal skills, provide opportunities to work with diverse groups, help adolescents organize work and career plans, and provide apprenticeship experiences.

Apprentice programs, school-to-work job matching, and vocational information programs are examples of school-community teaming. In addition, schools and businesses can:

- Share trained personnel. For example, technology firms can share personnel with high schools to teach science, mathematics, computers and information systems management.
- Share equipment and facilities. This may be accomplished through cooperative buying and leasing of equipment.
- Share "brain power." Individuals with expertise can serve as consultants, resource teachers, and members of boards and school advisory groups.
- Develop computer networks to share information. Networking can provide students and teachers with access to current research and programs to design instructional activities, and offer interactive school-industry relations (Harbaugh, 1985).

Linking School and Work: The Importance of Adult Mentors

Adult mentors can serve as powerful models for children and young people. Bronfenbrenner suggests that in order to empower children, social systems must design experiences that provide many and varied interchanges among children and adults. Human systems that place a priority on the involvement of adults and children in learning about the environment, and how they can influence it for the better, are certain to have a positive influence on society (Bronfenbrenner, 1979).

Principles for Planning School-Workplace Experiences

Extending the learning process through school-workplace activities can be achieved most effectively when we recognize that:

- Learning is a process that requires the use of the sensory system and the human environment. To design viable school-community programs we must recognize that children learn by experiencing ideas in a multi-sensory manner and by interacting with events and concepts in different settings.
- Learning is a process in which inquiry is enhanced as school and community cooperatively share talents, ideas, skills and resources.
- Learning is a continuous process that occurs throughout the life span and across all areas of our social and economic system.

In conclusion, we must recognize that learning and work are intimately connected and must be embedded within our total life style. As Hartoonian and Van Scotter (1996) note, "People in the work force and those preparing to enter the work force will require three distinct but interrelated attributes or qualities: scholarship, citizenship, and artisanship" (p. 557). We must strive to develop all three qualities in children and young people if we hope to have a social and economic system that continues to nurture a democratic society.

References and Resources

Adams, R., & Adams, N. (1992). Acid rain: A teaching focus for the intermediate grades. *Childhood Education, 68*, 282-289.

Bronfenbrenner, U. (1986). Alienation and the four worlds of childhood. *Phi Delta Kappan, 67*, 430-436.

Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.

Clinchy, E. (1995). Learning in and about the real world: Recontextualizing public schooling. *Phi Delta Kappan, 76*, 400-404.

Cole, E. (1992). Art and learning: Fostering ecological awareness. *Childhood Education, 68*, 285-289.

Danzberger, J., & Usden, M. (1984). Building partnerships: The Atlanta experience. *Phi Delta Kappan, 65*, 393-396.

Erikson, E. (1982). *The life cycle completed: A review*. New York: W.W. Norton.

Harbaugh, M. (1985). Schools are bullish on business. *Instructor, 4*, 24-27.

Hartoonian, M., & Van Scotter, R. (1996). School-to-work: A model for learning a living. *Phi Delta Kappan, 77*, 555-560.

Hass, T. (1992). *What can I become: Educational aspirations of students in rural America*. Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. ED 345931.

Hymes, J. (1981). *Teaching the child under six*. Columbus, OH: Charles Merrill.

Kamerman, S., & Hayes, C. (1982). *Families that work: Children in a changing world*. Washington, DC: National Academy Press.

Kerka, S. (1992). *Multicultural career education and development*. Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. ED 347402.

Lewis, A. (1992). *Urban youth in community service: Becoming part of the solution.* New York: ERIC Clearing house on Urban Education. ED 351425.

Miller, J. (1992). *The national career development guidelines.* Ann Arbor, MI: ERIC Clearinghouse on Counseling and Personnel Services. ED 347493.

Piaget, J. (1950). *The psychology of intelligence.* London: Routledge and Paul.

Reed, J. (1980). Children and museums: Books and activities. *Children Today, 9,* 19-22.

School-to-work transition: Its role in achieving universal literacy. (1991). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. ED 329806.

Silver, A. (1978). Bringing art to the classroom: The Taft Museum in-school program. *Children Today, 7,* 2-5.

Singer, J. (1992). People, parks, and rainforests. *Childhood Education, 68,* 271-274.

Swick, K. (1982). Business and industry as facilitators of community life. *Childhood Education, 59,* 80-86.

Swick, K. (1987). The school-workplace interface: Extending basic learning through an ecological approach. In B. Hatcher (Ed.), *Learning opportunities beyond the school* (pp. 33-38). Washington, DC: Association for Childhood Education International.

Swick, K. (1988). Reaching beyond the classroom: Using the human resource environment. In M. Brown (Ed.), *Quality environments: Developmentally appropriate experiences for young children* (pp. 87-94). Champaign, IL: Stipes.

Swick, K., Brown, M., & Robinson, S. (1984). *Toward quality environments for young children.* Champaign, IL: Stipes.

Tango, D. (1985). Between education and business. *The Educational Forum, 49,* 423-432.

Wirth, E. (1993). Education and work: The choices we face. *Phi Delta Kappan, 74,* 360-366.

Wonacott, M. (1992). *Apprenticeship and the future of the work force.* Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. ED 347403.

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Community Service Groups Enhance Learning

Recently, I spoke at my high school's annual alumnae meeting in Unadilla, New York. I was glad for this opportunity to say "Thank you" to the community in which I had resided from 1st grade through high school graduation. Thanks were due the teachers for working with me and my classmates on theater productions, musical events, fundraising activities, community service projects and just plain homework; the community service organizations for offering programs of informal learning and recreation; the business owners for contributing to the annual Halloween party and various community cultural events; and the churches for providing summer programs and other supportive services. Thanks were also due my friends' parents for many snacks, dinners and "overnights" at their homes, and to my own parents and family for continuous love and support.

In so many ways, the people of Unadilla were helpful as I grew up in this small town. Was I too nostalgic on this occasion, reminiscing about a past that doesn't exist in today's world? I don't think so. My feelings were well grounded in current writings of child psychologists and learning theorists on the needs of all children as they learn and grow.

According to Urie Bronfenbrenner (1981), children need enduring relationships with caring adults who spend time doing meaningful things with them. Burton White (1982) says children need people who speak with them; they need praise for small everyday events and opportunities to explore their environment. Jean Piaget contends that children need time to act upon their physical world and to interact in their social world.

Today, there is increasing recognition that all of the separate influences upon a child's life are interdependent. Because the total environment influences a child's development, there must be planned cooperative interaction among those parts of society having great influence on a child's life—the family, the school and the community.

Some of the most important influences in the lives of children are the experiences they gain by sharing and learning together with peers and adults in the informal environments of community service groups. The purpose of this chapter is to suggest that community service groups can form a strong link between formal education and learning in the home, and thereby assist in promoting a developmental approach to education.

Community Service Groups

Community service groups include youth-serving agencies, nonprofit organizations, museums, theater groups and church-related organizations. Well-known groups include Girl Scouts, Boy Scouts, Boys and Girls Clubs, YMCA, YWCA, Red Cross, Big Brothers/Big Sisters and Camp Fire, Inc. These organizations provide programs at the national level that are adapted to meet specific local community needs. In addition, grassroots community service groups like "Playing To Win" and the Jackson Heights

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Community Development Corporation have emerged. Designed at the local level, they meet specific current neighborhood and community needs in areas like East Harlem.

These groups provide an important link between family care and formal education. They encourage family participation in planning and operation. Often, they supply materials and training to help parents become more effective teachers of their own children. Many work with school systems to offer supplementary programming or alternative school curricula.

Community service programs have many advantages. Because attendance is not required and the curriculum content does not have to adhere to particular guidelines, informal programs have the potential to provide a learning environment quite different from that of formal education. Young people join voluntarily and their intrinsic motivation to learn can be very high. In an informal environment, they may eagerly learn content that seemed difficult or uninteresting in the formal school setting.

Informal programs offer greater flexibility in sequence and scope than most approved curriculum, thus appealing to children's current interests. Often, the learners have an opportunity for active involvement in the learning process because they are responsible for planning the activities and evaluating the results. Activities have immediate as well as long-range interest and the program can readily address children's emotional, intellectual and physical needs in a holistic manner. In addition, supportive community volunteers and consultants provide positive role models and supplement the parents' role in the learning process.

Learning Skills for Daily Living

Skills required for daily living and the decisions that young children must make have increased in complexity. Today, self-sufficiency is required in an environment that is unpredictable and potentially hostile. At the same time, the supportive structures for learning these skills are being taxed. More children must take care of themselves before and after school as mothers enter the workforce. The number of families with a single head of household is growing. Children are assuming responsibilities for their own well-being and that of other members of their family. Once, these responsibilities were sustained by adults in the extended family or by small cohesive communities in which everyone knew and assisted one another. Now children learn these skills from a variety of people and contexts.

The "I Can Do It" program of Camp Fire, Inc., and the "Prepare for Today" program of Boy Scouts of America are examples of two community service programs that develop skills for daily living. "Prepare for Today" enables young children to care for themselves when they are alone, to help their families deal with problems, to take action before a problem becomes an emergency and to care for younger brothers and sisters. In booklet form, the program is designed for community, church or education groups, and activities must be completed with an adult.

For example, children develop a list of emergency phone numbers. They learn how to behave when a stranger comes to the door and they are alone. They learn how to plan, select and prepare a healthful meal for themselves and their families. They learn about electric wiring, water pipes, locks, windows and stoves in their homes so that they can act wisely in an emergency. They learn about their neighborhoods, their individual locations, services and dangers. They practice basic skills in entertaining and caring for a younger child when adults are not present.

The Camp Fire "I Can Do It" program is a series of short courses designed to teach children self-help skills. Each course has a strong parental component. Recently, when a parent fell down a flight of stairs and was unable to move, one child who had completed the program contacted emergency help and comforted the parent until help ar-

rived. The child credited the Camp Fire program with teaching her how to handle the emergency.

Another effective community service program is Big Brothers/Big Sisters of America. This organization provides an opportunity for one-to-one sharing between an adult and a child. In this program, the direction for learning depends upon the needs of the child and the activities that the adult and child agree to share, but the purpose is to provide the child with a mature and caring role model.

Planning for a Healthy Life

As a society we are more concerned with our physical and mental health than at any other time in history. Economic insecurity, threats of environmental destruction from pollution, and stressful work and school environments cause great concern. Traditionally, health courses have been taught in school; many community service groups, however, are providing health education in relaxed social environments, working closely with parents and teachers to offer information and guidance that correspond with family beliefs and attitudes.

Programs in health awareness and health care through exercise, good diet and preventive health and medical care are offered by many youth-serving organizations. For example, "The Body Works," a Boys and Girls Clubs of America program, is designed to help children understand their health care needs and to prevent health problems. Most clubs also provide sex education. The Girl Scouts of the U.S.A. offers programs relating to both physical and mental well-being. In addition, the Boy Scouts of America's "Youth's Frontier: Making Ethical Decisions" is designed to help young people with their moral and ethical development. It establishes a framework in which health-related ethical questions can be addressed.

Finally, the Red Cross offers "Basic Aid Training" (BAT), an introduction to emergency procedures for 4th- and 5th-grade students. The Blood Education Series has four booklets to help children learn about how blood functions in the body. In all these health programs, parents are encouraged to work with their children and to adapt the materials to meet family needs, especially in the areas of human sexuality.

Planning a Career

Learning about oneself and what one wants to do in life is an important aspect of growing up. Many youth-serving organizations have programs that help young people prepare for future careers. Although their approaches to career development are varied, most include components of self-understanding and opportunities to broaden knowledge about careers with an emphasis on what it means to be a part of the working world. Also, some service groups provide work experience. For example, "Careers To Explore" is the Girl Scouts program for preadolescents ages 7-12; "From Dreams to Reality" is designed for girls 13-18 years old. "Choices: Career Aspirations" is the Girls Club program. Both Girls Club and Girl Scouts encourage girls to expand their career choices to areas that were once male-dominated.

In Boy Scouts, adolescents select an area of interest and meet regularly at the workplace with professionals. They learn the academic and skill-related requirements of the career, and they develop a personal relationship with an effective career model.

Boys and Girls Clubs of America offers programs to develop positive attitudes toward careers and the world of work. The programs emphasize skills for obtaining and keeping a job. Short-term employment opportunities at the club are provided. Also, the Boys and Girls Club cooperates with community businesses to provide additional community work experiences. Similarly, the Chambers of Commerce and Jaycees sponsor career development and work-related programs.

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Learning To Live Together in a Global World

In a world that is increasingly interdependent, it is vital to understand and appreciate people whose cultures and languages are different from one's own. As a result, young people need to learn how to address world issues in positive, effective ways. Community service groups and organizations are contributing to global understanding and peaceful coexistence. The Camp Fire Peace Program is designed for elementary and junior high students. Young children explore peacemaking at a personal level, expanding it to their families and communities. Teens study war and nuclear weaponry issues. While Camp Fire does not support a single solution, it encourages young people and adults to become informed citizens and to act on their beliefs.

Two Girl Scout projects help girls broaden their global perspectives. In the "Global Awareness Project," girls are encouraged to think globally and to act locally (i.e., to take action on global issues that affect their own community by participating in activities focusing on health care, hunger awareness, literacy, cultural heritage and conservation of natural resources). A second project focuses on promoting pluralism through multicultural activities that enable girls to understand and appreciate the diverse cultures of their community.

Through international exchange projects, Girl Guides and Girl Scouts from different countries come to America under the auspices of the Girl Scouts of the U.S.A. These visitors share their cultures and traditions. At age 14, U.S. Girl Scouts are eligible to participate in scout projects in 108 countries. Upon their return from abroad, these scouts share their international experiences with the community through presentations, small group meetings and personal interviews.

Youth for Understanding and the American Field Service provide additional opportunities for American high school students to live and study abroad. International service groups like Rotary provide similar programs. These exchanges are designed to strengthen global understanding and to help students appreciate diverse lifestyles.

Learning To Learn

Community programs not only teach skills for living, but also reinforce and supplement academic training. Two examples are "Playing To Win, Inc.," and the Jackson Heights Community Development Corporation. Founded by Antonia Stone, "Playing To Win" is located in the basement of the Washington House public project in East Harlem. It is dedicated exclusively to promoting computer use for minority education. Because academics are presented in a game format, students play against the machine, and they are not embarrassed by competition from other classmates or humiliated by incorrect answers. This program originally began with young people considered "incorrigible" by the public school system. It has expanded to incorporate after-school programs, child care centers, Jobs for Youth, and housebound women in the community. It is a model for other communities in how to link the education needs of the community to the public school system.

The Jackson Heights Community Development Corporation operates two free youth programs. I.S. 145 hosts an after-school program for neighborhood youths, ages 7-14, that features tutorial/remedial help in math and reading, beginning computer training and recreation. At I.S. 227, a beginning computer literacy course is open to youths ages 11-21.

Boys and Girls Clubs of America encourages academic education through the innovative "Power Points" program. Every Tuesday and Thursday from 3:30 to 5:00 p.m., members of the Valparaiso Unit of the Porter County Boys Club in Indiana score big points—not the kind that win games, but the kind that build better futures. Members learn and practice basic education skills. The motivation behind "Power Points" is the

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power sheets that members eagerly complete. Power sheets reinforce basic age-appropriate skills in reading, spelling, arithmetic and social studies. Teachers serve as consultants in the design of the activities. For each correct answer, members earn and accumulate power points and then cash them in for prizes. For example, 500 points earn a free admission to a Power Points pizza party, 1,000 points earn a club T-shirt, and 2,000 points entitle recipients to a special trophy presented at the annual recognition banquet.

Operation SMART (Science, Math And Relevant Technology) is an after-school project of the Boys and Girls Club of America. The purpose is to interest children in math and science and computer use. Members in Syracuse, New York, for example, made their own radios. In Pinellas County, Florida, members constructed and launched a small parachute, and they built a human skeleton with straws and thread. A Homework Hotline is part of the comprehensive tutoring program of the Boys and Girls Club of San Diego, California. When children cannot come to the club, they can call the Homework Hotline for assistance with academic problems.

Summary

Community service organizations play an important role in contributing to the education and development of children. Although their programs are broad in scope, informal in nature and voluntary in participation, they include vital skills for daily living, career development and health, as well as computer education and supplemental academic programming. Best of all, these groups provide children with a network of support among parents, teachers and community residents, and they encourage a developmental approach to learning.

References

American Red Cross. (1979). *Basic first aid training*. Garden City, NY: Doubleday.

American Red Cross. (1981). *Blood education series*. Washington, DC: Author.

Boys and Girls Clubs of America. (1983). *Choices: A teen-woman's journal for self-awareness and personal planning*. New York: Advocacy Press.

Bronfenbrenner, U. (1981). Annual Lucille N. Austin Visiting Fellow Lecture. Columbia University, New York.

Camp Fire peace program. (1985). Kansas City, MO: Camp Fire, Inc.

Careers to explore. (1979). New York: Girl Scouts of the U.S.A.

Community action for computer equity. (1985). Jackson Heights, NY: Playing To Win, Inc.

From dreams to reality. (1978). New York: Girl Scouts of the U.S.A.

Girl power! Health power! (1985). New York: Boys and Girls Clubs of America.

Health works. (1984). New York: Boys and Girls Clubs of America.

I can do it. (1984). Kansas City, MO: Camp Fire, Inc.

Larson, J. N. (1985). *Youth's frontier: Making ethical decisions*. Irving, TX: Boy Scouts of America.

Operation SMART. (1985). New York: Boys and Girls Clubs of America.

Power points. (1985). Valparaiso, IN: Boys and Girls Clubs of Porter County, Inc..

Prepare for today. (1982). Irving, TX: Boy Scouts of America.

White, B. L. (1982). *Education in the early years of life*. Keynote Address, ACEI Study Conference, Atlanta, GA.

The wide world of Girl Guiding and Girl Scouting. (1980). New York: Girl Scouts of the U.S.A.

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Oral History: Engaging Students in Community-based Learning

Local communities are rich with opportunities to extend learning beyond the school. Using community resources, students can listen to the experiences and personal memories of older citizens, study public and private records, or visit historic sites. The community can be an arena for active learning and educators should use it more.

An oral history project is one way to take students beyond the classroom to learn about and from the community. Oral history projects create an added dimension to the school curriculum and provide students with practical, real-life experiences. The process can be a source of new knowledge and skills, of excitement and wonder, and of deep appreciation for the wellspring of community life (Olson & Hatcher, 1982).

The purpose of this chapter, therefore, is first to define oral history as a workable method for active learning outside the classroom. A second purpose is to discuss how a classroom oral history project strengthens students' academic, social and personal skills while they acquire new knowledge and clarify values. A third purpose is to describe an oral history project from inception to final product and to provide teachers with a list of resources that will help them plan effective oral history projects.

What Is Oral History?

Oral history is an established research procedure used by historians to gather and preserve memories and knowledge of living people about the past (Sitton, Mehaffy & Davis, 1983). Oral histories allow individuals to experience an affective dimension in history—to understand vicariously what life was like in the past by interviewing long-time residents of the community. Textbooks, on the other hand, provide the sequencing of dates, names, relationships and causes of past events.

> Through oral history projects, students learn to be historians, investigating and recording real events from the lives of real people. As an added bonus, the process often results in opportunities for students to examine the same event from a variety of perspectives, perhaps even through conflicting reports—enhancing development of critical thinking skills. (Hickey, 1991, p. 216).

A classroom oral history project is characterized by two key elements. First, oral history is an active approach to the study of the past. Students are working historians engaged in live research. Second, an oral history project requires students to pursue information outside the school setting. In other words, the activities needed to complete such a classroom project send students into their home communities to personally research topics.

Ultimately, most oral history projects produce a historiography that preserves the knowledge and heritage of the local community. Historiographies become biographies, explanatory compositions, political narratives or directions for completing a task. The

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format for these final products varies. Some student projects culminate in radio broadcasts; others develop a collection of taped interviews for local libraries. Newspaper series, magazines, video programs, multimedia CD-ROMs and home pages on the World Wide Web are additional alternatives.

Most classroom projects center around a student-designed magazine that incorporates findings from taped interviews with local residents. The most famous classroom oral history publication, *Foxfire*, records the folk life and culture of Appalachian Georgia (Kazemek, 1985; Meek, 1990; Wigginton, 1975). The Foxfire project began in 1967 when Eliot Wigginton started an oral history project to preserve the area's heritage. Wigginton's high school English and journalism classes designed, wrote, published and marketed the *Foxfire* magazines.

How Do Oral History Projects Affect Students' Knowledge, Skills and Attitudes?
Oral history projects are a natural way to integrate knowledge (content), skills and attitudes. These projects are in line with the holistic approach to literacy development (Gandesbery, 1990; Green, 1994). Students expand and strengthen their reading and research abilities as they gather the background information needed to conduct a successful project. They must read extensively, locate specific information, take notes and research topics from both primary and secondary sources. Students sharpen reading and research skills, for example, by investigating old letters, souvenirs, scrapbooks, school yearbooks, almanacs, old newspapers, courthouse documents, historical society archives and church records.

Written language skills, including spelling, grammar and composition, are also refined. Students must work through the writing process of drafting, revising, restructuring and editing as they prepare transcribed interviews for print. Compositions must be coherently organized and cohesively written. Correct spelling and grammatical precision become paramount during final editing. These writing skills are honed for a real audience. Process writing, which includes peer editing, is a very effective instructional tool when implementing oral history projects.

Oral communication and interpersonal skills are also an integral part of an oral history project (Kazemek, 1985; Olmedo, 1993; Smith, 1990). When using both the community and school as a classroom, students interact, compromise, cooperate and deal with a wide range of people. In fact, the interview itself is a complicated interactive process that requires both speaking and listening skills. Students must identify citizens to be interviewed, make arrangements for the interviews and pursue promising leads that may surface during interviews. Oral communication skills are further strengthened as students work with others. For instance, students might negotiate prices, learn photographic strategies and create layouts for a printer. These activities sharpen students' speaking and listening abilities.

Oral history projects can reinforce positive attitudes about learning and, at the same time, help students understand and clarify their family and community values. Disconnected learners are one of the many crises we face in schools today. This disconnectedness stems from 1) students' inability to make connections between academic and experiential knowledge, 2) a paucity of deliberate and purposeful opportunities provided by the school to facilitate this integration and 3) discontinuities among home, school and community cultures. Oral history projects motivate students to study their family and community heritages (Aaron, 1992; Payne & Lyman, 1994). As they do so, students gain respect and appreciation for the people with whom they live (Garrett, 1994; Glimps, Simon & Ashton, 1995). Projects also teach, develop and reinforce academic and interpersonal skills. Students develop an understanding of self, a renewed sense of community allegiance and an intrinsic motivation to learn.

What Happens in a Classroom Oral History Project?

- Students and teachers must first determine an era, event or theme on which to focus. Fortunately, local communities have a wealth of stimuli to prompt student interest. Students can examine historical markers, plaques or cornerstones. They may investigate eras in the town's history or significant individuals in the town's development. Museum displays offer further topics to be studied. Local newspapers, particularly in smaller communities, have columns titled "Twenty-five Years Ago" or "Fifty Years Ago" that may suggest subjects for investigation.
- After the subject is selected, students begin their research. Textbooks and reference books are in-school sources, but old diaries, ledgers, letters and other memorabilia available in the community will give students a broader perspective on the subject. Pupils need to research the topic before interviewing local citizens if they are to ask pertinent and productive questions. Students might investigate how early settlers adapted recipes from their countries of origin to make use of the flora and fauna available in their new environments. To ask useful questions, the students would need to know something about traditional foods as well as local plants and animals.
- Next, students identify local citizens who have information about the era, event or topic of study. An interview appointment is secured. Then, the students compose interview questions that will encourage the interviewees to talk freely. Broad, open-ended questions are best, such as "What favorite memories do you have of your classmates and school?" or "Tell me how the families in your town celebrated special holidays when you were growing up." After the interview, students must validate what they learned with information from additional resources and other interviews.
- If publishing an oral history magazine is a project goal, students must transcribe the interview tape. This process is time-consuming, but more manageable if two students work together. Parent volunteers can assist younger pupils. The transcription is similar to the first draft of an essay. It will need extensive editing, revising and polishing. Students will rearrange, restructure and discard content until the composition is ready for final proofing.
- The actual printing of the magazine offers many opportunities for students to gain an understanding of the printing process. Many printers will work directly with students and teach them the steps to prepare camera-ready copy. For projects on a limited budget, students can produce the magazine themselves using desktop publishing programs.
- Marketing the magazine is the final step in an oral history project. Students arrange for sales by soliciting subscriptions or selling the publications door to door. Most communities are very supportive of student projects and are eager to purchase a tangible record of some facet of their local history and culture.
- Today's technology offers an exciting opportunity for wider data collection and dissemination of oral history projects. For example, students can construct a home page on the World Wide Web. They could use their home page to interview people outside the local community and to get expert advice from historians at colleges and universities. They could also conduct collaborative projects with students in other schools within their local, state and national communities. The Internet is a great way to publish projects and share them with others across the city or state, not to mention throughout the Americas and around the world!

The resources listed below may be helpful as teachers plan their oral history projects:

Alessi, J., & Miller, J. (1987). *Once upon a memory: Your family tales and treasures.* Whitehall, VA: Betterway Publications. 118 pages, plus bibliography.
This book includes detailed checklists of materials needed, fact-finding sources and activities involved in family history research. It suggests where to hunt for family documents such as birth certificates, address books and medical records. Also included are several age-appropriate classroom activities, and an extensive bibliography that covers topics in genealogical research, writing skills, interviewing techniques, personal development and family.

Brown, C. S. (1988). *Like it was: A complete guide to writing oral history.* New York: Teachers and Writers Collaborative. 109 pages, plus resource list and two appendices.
This book offers very practical, step-by-step guidelines for collecting life stories by conducting interviews, using a tape recording, transcribing, and editing the transcript. Specific suggestions are given on the various forms that the final written product can assume, such as short pieces, biography and multiple narratives. The book also includes sample interview questions; a sample oral history project and sample interview are attached as appendices.

Davidman, L., & Davidman, P. T. (1994). *Teaching with a multicultural perspective: A practical guide.* New York: Longman. 200 pages, plus appendices.
These activities can help teachers reflect on their beliefs about multicultural education, as well as their own ethnic identities. Other activities help teachers identify information and tools that they can use to transform their classrooms into "illuminating classroom[s] and community database[s]." This book helps teachers to recognize that student behavior is largely influenced by cultural contexts, including family, community and ethnocultural groups.

Groves, D. (1996). *The web page workbook.* Wilsonville, OR: Franklin, Beedle & Assocs.
This practical, easy-to-follow textbook will help students create Web pages while learning about design techniques and HTML language. The book includes EarthLinks Total Access, a software package that includes Netscape Navigator and Eudora E-mail, and HotDog Web Editor, which allows students to design and view their Web pages offline.

Preservation Forum, National Trust for Historic Preservation. (1993). *Heritage education: A community-school partnership.* Washington, DC: Author. (ERIC Document Repro. Service No. ED 68602.) 21 pages.
This monograph stresses the importance of the school-community partnership in promoting cultural education. Suggestions are given on the ways that teachers can use the historical and cultural resources in their areas to teach history, geography, social sciences, civics, the arts, language and literature, science and technology, basic skills and higher order thinking skills. Also included is information on funding, resources and program design as well as descriptions of existing programs.

Trumpold, C., & Kellenberger, G. (1990). *Time and tradition: Amana Community schools folklife program.* Amana, IL: Amana Arts Guild. (ERIC Document Repro. Serv. No. ED 388568). 75 pages plus bibliography.
This book highlights curricular activities, planned to coincide with holidays, that compare community and family folk life traditions with current practices. Also included are resource letters, a bibliography and information on teacher orientation workshops.

Conclusion

By participating in a classroom oral history project, students learn about the people and events that shaped their community and preserve the unique and valuable folk life of the locale. Such oral history projects are holistic in nature and integrate students' academic and personal knowledge and skills. The process reinforces positive attitudes about learning and facilitates values clarification. Today's technologies make it easier to produce and disseminate oral history projects across local, state, national and world communities, if desired. We hope that educators will use the resources and ideas presented in this chapter to engage all of their students in community-based learning.

References

Aaron, L. (1992). Using genealogy to teach history. *Magazine of History, 6*(3), 5-7.

Gandesbery, J. (1990). Ordinary lives illuminated: Writing oral history. *The Quarterly, 12*(1), 14-19.

Garrett, J. T. (1994). Understanding Indian children: Learning from Indian elders. *Children Today, 22*(4), 18-21.

Glimps, B., Simon, G., & Ashton, B. (1995). Where did you come from, what did you see? Using oral history and oral tradition to build understanding. *PTA Today, 20*(3), 17-18.

Green, B. (1994). Oral histories link language and literacy. *Reading Psychology, 15*(2), 131-137.

Hickey, M. G. (1991). And then what happened, grandpa? Oral history projects in the elementary classroom. *Social Education, 55*(4), 216-217.

Kazemek, F. (1985). Stories of our lives: Interviews and oral histories for language development. *Journal of Reading, 29*(3), 211-218.

Meek, A. (1990). On 25 years of Foxfire: A conversation with Eliot Wigginton. *Educational Leadership, 47*(6), 30-35.

Olmedo, I. M. (1993). Junior historians: Doing oral history with ESL and bilingual students. *TESOL Journal, 2*(4), 7-10.

Olson, M., & Hatcher, B. (1982). Cultural journalism: A bridge to the past. *Language Arts, 59*, 46-50.

Payne, E., & Lyman, B. G. (1994). Family and community oral history. *Reading Improvement, 31*(4), 221-223.

Sitton, T., Mehaffy, G., & Davis, O. L. (1983). *Oral history: A guide for teachers (and others).* Austin, TX: University of Texas.

Smith, D. J. (1990). Taking language arts to the community. *Educational Leadership, 47*(6), 74-75.

Wigginton, E. (1975). *Moments: The Foxfire experience.* Kennebunk, ME: Ideas, Inc.

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Learning in Communities with Limited Resources

Small towns with populations under 2,500 and rural areas often carry the image of isolation. Teachers in these areas generally have few museums, concert halls and noteworthy cultural facilities nearby to serve as resources for field trips, guest speakers and instructional activities. The sense of isolation and the perception that resources are few, however, cannot be justified. The resources are there; they just are not so obvious as those in large cities. A marble and concrete museum that fills two city blocks is impossible to miss, but a heritage trunk filled with antique clothes is easy to overlook. Yet both the museum and the trunk hold great potential for extending learning beyond school walls and for bringing the community to children.

The level of effort and imagination required to make the best use of resources in a small town or rural area is great, but so are the rewards. In fact, teachers' efforts to involve the community in children's schooling often results in warm, widespread support, and at least one photograph and accompanying article in the local newspaper (Office of Educational Research and Improvement, 1994). It also builds a community of learners while lightening the sense of isolation as residents' far-ranging interests are included in the school's curriculum.

People As Resources To Extend Learning

People are the principal resources of the rural and small-town school. Teachers need to identify the wealth of experience and richness represented by community residents and capitalize on this for the benefit of their students. Small towns and rural communities also should be thought of as part of their larger community, the county.

The county extension agency, the road commission, the sheriff's department, the Department of Wildlife and Fisheries, the library, the library archives, the county records and code departments, and courts and their personnel are among a number of county resources available to educators. They offer reference information, primary documents, diaries, photographs, maps and guest speakers.

Additionally, state resources are plentiful and prove to be valuable assets as rural teachers seek to extend their traditional curriculum. Inquiry into the instructional resources held at centers for economic education, for instance, can provide myriad creative learning opportunities. These centers are usually housed on state college campuses. Lesson plans, instructional learning kits, brochures, videos, CD-ROMs and related literature for economic education are available for teachers to borrow and, often, take.

Nearly every state has active geographic alliances that provide abundant lesson plan ideas, institutes, inservice programs, conferences, sources for learning materials and statewide experts on geographical facets and related areas. A state geography alliance

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may be faciliated by several university professors from specialized areas of study such as cartography, orienteering or cemetery geography. These expert often facilitate tuition-free summer geography institutes for teachers. They sponsor other workshops and conferences throughout the year, giving teachers the opportunity to develop professionally and acquire armloads of teaching resources.

Law-related instructional materials may be obtained from state and national organizations. The State Bar Association can help rural teachers tap into these available lesson plan prototypes that span the content and age appropriateness of the K-12 curriculum.

As schools, educators and students rapidly become technologically literate, the Internet is another vast clearinghouse for resources beyond the classroom (Beckner & Barker, 1994). Articles, primary documents, photographs, sound bites, exchanges with experts in every field, and communication with other school students are only a few of the myriad sources for research; all of these create endless possibilities that bring the world into rural classrooms via computers.

McCain and Nelson (1981) developed an inventory of over 100 kinds of readily available community resources for rural areas and small towns. The inventory identifies resource people and organizations that educators often overlook, including county surveyors, soil conservation managers, local historical society personnel, antique collectors, school board members, justices of the peace, legal counsel for industries, union representatives, tribal leaders and political party personnel. These individuals can serve as classroom guest speakers or as the focus of field trips.

Once contact is established, teachers and students may discover that these individuals have interesting hobbies, talents and memories that could have great educational value. During an informal discussion with the game warden, for example, students may learn that she is the descendant of early pioneers in the area, and that she possesses photographs of early homesteads and actual cooking utensils used by her great-great-grandmother. As resources from the community are integrated into the school's curriculum, residents can share their occupational, personal and recreational interests. This experience helps children understand how individuals contribute their personal and professional interests to serve others.

Model Programs To Extend Learning in Small Communities

Businesses can initiate programs that provide valuable learning opportunities for children. For example, Trenkle (1990) outlines a cooperative adopt-a-school project between Pennsylvania State University (Behrend College) and an elementary school. Evans (1992) recounts the successes of mentor and adopt-a-school programs and lists some famous individuals who have been involved in such projects. Among these individuals are Barbara Bush, Hillary Clinton and Bill Cosby. Although it is difficult for rural schools to make contact with businesses located in distant cities, several schools in a county may work together, individuals who have personal contacts with businesses in larger cities may get involved, or the state department of education or a chamber of commerce may offer to help.

Local businesses can also adopt a school. A local restaurant, farm cooperative or manufacturing plant may arrange for children to trick-or-treat on Halloween at the sponsor's business. The company may endorse a valentine-making event or sponsor a paper airplane flying contest. Construction supplies may be donated by the business, and employees could judge entries or help with delivery of completed products for display at a nursing home, local grocery store or library. Sponsorship of students' artistic and written works is another possibility. Suggestions for events and activities should initially come from the school. As the school/business relationship develops, however, the sponsoring firm should become the principal initiator.

Capitalizing on the vocational interests and talents of individuals in the community and initiating local school adoption programs are two means of providing valuable learning experiences for students. Teachers can extend basic learning through other activities that originate in the classroom but quickly move beyond the school confines. Through outside sponsorship, students' work can be highlighted and displayed at local restaurants and businesses, highway rest stops and other places where the public can take notice of the support the community provides for the school.

Hutto (1990) describes partnerships to strenghthen elementary science education. She has developed a guidebook that helps rural schools identify outside resources for strengthening science instruction. The rural advantage in science teaching is described by Coble and Koballa (1983), who point out that rural teachers have opportunities to present their students with concrete examples of the science concepts they are studying, simply by going outdoors. Specific examples of earth science, food webs, succession and comparative ecology abound in rural areas. A natural resource science guide by Sunal and Sunal (1989) contains complete lesson plans and teaching materials. The guide focuses on the natural enviroment and on ideas for appropriate study of natural resource science that can be integrated easily into the existing curriculum.

Community Places, Objects and Activities To Extend Learning

Historical Sites. Teachers can use historical sites within the local community as resources. Pupils can identify and study many historical sites, including: public buildings, businesses, old homes, battlefields, Native American mounds and village sites, abandoned schoolhouses, old railroad depots, ferries, piers of torn-down bridges, or places where famous individuals stayed or events occurred. The site need not be extremely old, but should have historical, artistic or cultural value. Children will find a gas station or grocery store circa the late 1940s interesting, for instance, because the structure contains clues about what life was like when their great-grandparents were young adults.

Rural children find America's country schools most interesting. Gulliford (1991) describes these schools, their architecture and their cultural and educational legacy. He presents anecdotes and memoirs of interest to students and teachers, and explains efforts to preserve country school architecture.

Once resources have been identified, field trips can be arranged so that students may examine, photograph and sketch the building or site (Weible, 1984). Potential follow-up projects include creating postcards from the photographs (Bucher & Fravel, 1991), drawing a map of the site, and writing articles for the local newspaper and church bulletins requesting information about the place. As a final product of the research, a school or public library resource file can be developed from the children's photographs, drawings and writings. As another option, photographs taken by the students can be put on a computer disk. This is an inexpensive option available from many film developers. They could also be put on a CD-ROM disk, a more expensive alternative but one with greater storage capacity. These materials can then be shared with other children as they learn about their community.

Heritage Trunks. In the past, museums and state and local departments of education have developed heritage trunks to extend children's learning. The West Virginia Department of Education placed heritage trunks in regional education service centers throughout the state for classroom use. These old trunks contain antique clothing that children can try on and use in role-playing. Old letters, a dulcimer and traditional songs are among other items included in the trunks.

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Museums also lend heritage trunks. The Institute of Texan Cultures in San Antonio offers a pioneer trunk containing a washboard, quilt, pioneer bonnet and dress, coffee pot, lye soap and other artifacts representative of early Texan frontier life. The museum has heritage trunks about Native American and cowboy life, ethnic holidays, medicine in early Texas and other topics. Teachers in rural settings will want to discover whether similar resources are available in their locale. If not, they may involve their students and the community in creating a heritage trunk representative of their community. Other sources of heritage trunks include state humanities councils and local historical societies. The Institute of Texan Cultures has published a book of resource information and instructional ideas to teach about the cultural groups that influenced the development of Texas (Stanush, 1988). This book is an excellent model that can be adapted to reflect the cultural richness of any community.

With teacher guidance, children can develop their own heritage trunks. This is an exciting project. The pupils should first determine the period of interest and collect artifacts representative of the social milieu and times. Periods to examine can be as specific as the 1920s or the 1970s. Children can advertise for heritage items through the local newspaper, television and radio station. Common household utensils can be considered, as well as old postcards, special occasion cards, newspapers and magazines, photographs, records, clothing, toys, etc. Tape-recorded interviews with local residents also can be part of the trunk's contents. The tape-recordings can preserve childhood memories of activities on national holidays or other special days, descriptions of historically significant events and additional subjects of interest to children.

Today Trunks. The "today trunk" is an interesting version of the heritage trunk. This activity focuses on the current popular culture. Children can include favorite recordings, comic books, posters, toys and clothing items now in fashion. These objects can be gathered from home and the community at large. High school students, the arbiters of popular culture, can be of assistance in this activity. This project provides opportunities for students to contrast the lifestyles and influences of today with those of the past. As a result, pupils will begin to recognize the effect of technology on their way of living.

Multimedia Heritage Sets. Slide sets and videos can extend basic learning. Many items are easily damaged or too valuable to be placed in heritage or today trunks. These items, however, can be photographed and shared in a slide/tape show or video. A written script, a list of related resource people and a bibliography of references can accompany the slide set or video. For example, Sunal (Sunal & Dupree, 1982) designed a heritage slide/tape show for children that highlights the artistry of Appalachian families. This set includes examples of handmade baskets, quilts, pottery and brickwork. The slide set makes it possible to share these beautiful resources with students.

Although teachers can make heritage slide sets and videos for classroom use, a student-designed and completed project results in more meaningful learning. Students have opportunities to further develop their skills in researching, writing, photographing, organizing and sharing their findings. As students and rural classrooms develop technological capabilites, students can develop Hypercard and/or Hyperstudio stacks, and Power Point presentations, as they organize historical data representative of their research interests. Many topics will interest the children: Early Life in Our Community, Household Items and Toys of Long Ago, Restored Structures and Their History, Special Residents and Their Contributions to My Town. Multiple copies of the final slide/tape set, video or software presentation can be made and placed in the school or public library for others to enjoy.

Community Profile. The creation of a community profile is another way to extend children's learning. Weible (1984) suggests that a community profile should be a compilation of accurate, interesting and informational material portraying people, places and events that have shaped the identity and personality of an area. The profile can have a chronological format or it can focus on case studies highlighting life stories, major events or fondly remembered experiences.

The first step in this process is to have students determine important events and individuals who have influenced the community. Important events might include the advent of the railroad in the community, the discovery of oil or coal or other economic resources, and the incorporation of the town. Important individuals might include founders, the first mayor, business and community leaders, even infamous residents who added to the character of the town. The profile can include both current and deceased residents. Research for this activity can be based on personal interviews and information obtained from old newspapers and town records. The community profile can be shared in a series of student-written articles for the newspaper or in the form of a scrapbook collection, or through a Hyperstudio or Power Point presentation for the library. Children find this a fascinating experience and, consequently, they develop a historical appreciation of the events and people who shaped their community.

Community Days. Community days in rural areas serve as a culminating activity to community-related studies. Celebrations can also be held at regular intervals to take advantage of seasonal activities, both traditional and modern. This culminating activity refines student learning by requiring pupils to synthesize the information they have acquired about their community in order to share it with residents. An Autumn Community Day, for example, can feature traditional activities such as bobbing for apples, gathering pumpkins and squash from the fields, making caramel corn and listening to traditional ghost stories told by community residents. The ghost stories can be taped by students and included in a heritage trunk or sold as a student money-making project. Modern events, such as the autumn seafood and oystering festivals along Maryland's Chesapeake Bay, might be the focus of the Community Day. Students can prepare a booklet detailing the history of oystering in the area or compile a collection of favorite oyster recipes to share with Community Day participants.

Resources for Rural Teachers

Loustaunau (1979) suggests the foremost problem of rural and small schools is providing an adequate curriculum for children. She recommends that several schools cooperate by sharing services. One way to share services is through cooperative development of a community resources handbook. The handbook can be developed by the local school system or by the state department of education. Two examples of state handbooks are the *Nebraska Department of Education's School and Community Involvement* (Conway, 1981) and the West Virginia Department of Education's *Handbook of Appalachian Materials* (Anderson, Phillips & Plumley, 1972). Although quite different in conception and content, both handbooks serve as excellent models for identifying resources in rural settings.

The Arts and Humanities Programs in Rural America (Stapelton-Otway, 1991), published by the Rural Information Center, has a series of directories containing accessible resource materials and listings of organizations, funding resources and databases related to cultural programs existing in rural communities in the United States. This directory places unlimited learning resources at rural teachers' fingertips.

Berliner's (1989) sourcebook for rural educators describes creative, resourceful and effective school programs and practices. Sixty-one programs in rural and small schools

in four states are identified. Program descriptions are divided into six categories: innovative instruction; curriculum development, improvement and enrichment; using technology; students at risk in social and academic growth; special education; and school improvement.

The World Wide Web on the Internet also lists resources that may be helpful to rural teachers as they plan and implement their curriculum. Web sites often change, so no permanent list can be developed. In 1997, however, a search for Web sites that may be of interest to rural teachers found the following: rural education bibliographies, rural education digests, rural education directory (organizations and agencies), U. S. Department of Agriculture rural development resources, a rural history center (University of Reading, England), and the Vermont Center for Rural Studies.

The Library of Congress card catalog also is accessible over the Internet. Among the relevant subject headings are: country life, rural families, rural geography, rural industries, rural schools and rural women.

Some listservs focus on rural topics. These also are subject to change. As of 1997, some of these were: *Rural Trends and Conditions Journal*, rural networking discussion list, rural sociology discussion list and rural community development discussion.

Fundraising

Fundraising options for rural schools are identified by Lutfiyya (1993) that can help support everything from technology to heritage trunks. Fundraising strategies should be developed in response to local needs. One strategy often found in rural schools is fundraising through ad hoc events such as sales and raffles. These events can be held annually over succeeding years, gradually developing a tradition for the event and improving it. Renting school space for an event or renting school equipment to individuals and groups in the community is another means of fundraising. Some schools have used surveys that combine requests for feedback on the school effectiveness with a request for contributions. Donated equipment, services and products can be auctioned. A school alumni association can be established and can help with fundraising. Lifelong learning programs can be established and designed to generate income beyond costs. While each option requires careful planning and some expertise, most can work at the local level.

Conclusion

Rural and small-town children have access to the world's culture through the residents and resources of their own communities. Teachers and administrators can readily bring their communities into the classroom to extend and enrich the traditional curriculum. In a complementary fashion, children can move beyond their classrooms into the broader community for this same purpose. In the process, students will discover that individuals of all ages and walks of life have knowledge and wisdom to share. They will come to appreciate the continuity of life and its experiences from one generation to the next. Students will have opportunities to observe firsthand the effect of technology on lifestyles and learning, both past and present. Finally, they will develop a deeper sense of community and an appreciation of their heritage and their local, state, national and global connections.

References and Resources

Anderson, L., Phillips, P., & Plumley, W. (1972). *Handbook of Appalachian materials.* Charleston, WV: West Virginia Department of Education.

Beckner, W., & Barker, B. (1994). *Technology in rural education. Fastback No. 366.* Bloomington, IN: Phi Delta Kappa Educational Foundation.

Berliner, B. (1989). *Promising programs and practices: A sourcebook for rural educators.* San Francisco, CA: Far West Laboratory for Educational Research and Development. ERIC Document Reproduction Service No. ED 320 737.

Brooks, J., & Brooks, M. G. (1993). *The case for constructivist classrooms.* Alexandria, VA: Association for Supervision and Curriculum Development.

Bucher, K. T., & Fravel, M. (1991). *Local history comes alive with postcards.* ERIC Document Reproduction Service No. EJ 427 742.

Coble, C., & Koballa, T. (1983). The rural advantage. *Science and Children, 21*(2), 19-22.

Conway, K. (1981). *Nebraska department of education, career education, school-community involvement.* Lincoln, NE: Nebraska Department of Education.

Evans, T. W. (1992). *Mentors: Making a difference in our public schools.* ERIC Document Reproduction Service No. ED 356 302.

Gulliford, A. (1991). *America's country schools* (2nd ed.). Washington, DC: National Trust for Historic Preservation.

Hutto, N. (1990). *Using partnerships to strengthen elementary science education: A guide for rural administrators.* Albuquerque, NM: New Mexico Museum of Natural History. ERIC Document Reproduction Service No. ED 326 361.

Loustaunau, M. (1979). *Small rural schools can have adequate curriculums.* ERIC Document Reproduction Service No. ED 100 559.

Lutfiyya, M. (1993). *Integrated services: A summary for rural educators.* ERIC Digest. Charleston, WV: ERIC Clearinghouse on Rural Education and Smal Schools. ERIC Document Reproduction Service No. ED 357 906.

McCain, A. E., & Nelson, M. (1981). *Community resources for rural social studies teachers.* ERIC Document Reproduction Service No. ED 197 906.

Office of Educational Research and Improvement (OERI). (Spring/Summer, 1994). *Education in rural America. OERI Bulletin.* Washington, DC: Author.

Stanush, B. E. (1988). *Texans: A story of Texan cultures for young people.* San Antonio, TX: The University of Texas Institute of Texan Cultures.

Stapelton-Otway, G. (1991). *The arts and humanities programs in rural America. No. 8.* Beltsville, MD: Rural Information Center Publication Series.

Steffey, S., & Hood, W. J. (Eds.). (1994). *If this is social studies, why isn't it boring?* York, ME: Stenhouse Publishers.

Sunal, C. S., & Dupree, M. (1982). *An exploration of the visual design heritage of Appalachian families.* Charleston, WV: Humanities Foundation of West Virginia.

Sunal, D., & Sunal, C. (1989). *Natural resource science education guide.* Tuscaloosa, AL: U.S. Forest Service and The University of Alabama.

Taggert, D. (1983). *School adoption program.* ERIC Document Reproduction Service No. ED 233 831.

Trenkle, M. R. (1990). *Penn State-Behrend/Diehl elementary school adopt-a-school program.* ERIC Document Reproduction Service No. ED328 130.

Weible, T. (1984). Using community resources to enhance the rural school curriculum. *Small School Forum, 5,* 13-14.

Weitzman, D. (1975). *My backyard history book.* Boston: Little, Brown and Company.

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Learning Through Serving

One experience I'll never forget was on Valentine's Day. I went to work and the teacher, Elizabeth, was talking about love. And then one little girl came up to me and said, "I love you," and hugged me. Then of course all the kids did it too. I'll never forget that day because on that day those kids told me, through those words, that I was doing a good job. (Veronica, Grade 8, 1985)

All of us, whether preschool child, college student, parent or worker, need to know and have others affirm that we are indeed "doing a good job." That assurance may be most needed during early adolescence. Too often, it appears that the plaudits and recognition only go to the athlete or the academically successful. Yet, relatively few youngsters in the vulnerable middle school years will excel in these areas. "Despite motivation and persistence, only a small number can compose sonatas, discover new particles, or predict next year's gross national product," Jerome Kagan reminds us. He suggests that to recognize and reward "acts of honesty, cooperation, and nurturance" is not only desirable, but also will promote learning and individual development (Kagan, 1981, p. 163). Programs of service learning, one form of youth participation in the community, are based on this premise.

Veronica's experience was more than the glow of being appreciated. She learned that an investment of self and effort brings enduring rewards. Veronica is far from unique. In rural communities and urban areas, in suburbs and small towns, young people emerging from childhood are exploring their world and their values, sharing their skills and enthusiasm, caring and contributing through their participation in service learning.

Veronica was a participant in the Child Care Helper Program at her school. The Child Care Helper Program was initiated in 1982 by the Early Adolescent Helper Program, based at the City University of New York's Center for Advanced Study in Education. In 1992, with support from the DeWitt Wallace-Readers Digest Fund, the Early Adolescent Helper Program "went national," and the National Center for Service Learning was established. As of this writing, the NCSLEA is now the National Helpers Network and is a presence in middle schools across the country. In New York City alone, since the Helper Program's founding, more than 3,000 young people have learned and grown as they contributed to their communities; preschool centers, elementary schools, senior centers, nursing homes, environmental programs, classes for children with special needs, and neighborhood improvement projects have all benefited from the energy and commitment of these youngsters.

Two pieces of federal legislation, the National and Community Service Act, signed by President Bush in 1990, and the National and Community Service Trust Act of 1993, signed by President Clinton, have helped to accelerate and expand service learning at all levels. The Corporation for National and Community Service, created under the 1993 legislation, funds service learning programs for kindergarten through high school

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under its Learn and Serve America grants. As a result, programs of service learning have proliferated. This has been particularly true at the middle school level, as planners and practitioners search for appropriate programs that will engage these students and strengthen their ties to school and community.

Another Corporation-funded project is the National Service-Learning Clearinghouse at the University of Minnesota. The Clearinghouse collects and disseminates information about the status of service learning nationally. The database is up-to-date and useful.

Developmental Needs of Adolescents

It is only in the last 25 years that early adolescence has been recognized as a unique developmental stage, with its own distinctive characteristics and needs. Yet these youngsters are at a critical period in their development. Changing and growing more rapidly than at any time since the first two years of life, volatile and unsure of themselves, they are also striving with new energy and purpose to define who they are. Nancie Atwell, an 8th-grade English teacher, describes this period with wisdom and humor born of listening, observing and enjoying her students:

> Physically and emotionally, adolescence can be a pretty unsubtle time of life. Physically, junior high students are antsy. They tap pens, jerk their legs and feet, squirm, gaze around the room and into space. Even when the teaching mode decrees that kids remain stationary—in rows, facing front, and silent—ripples of constant motion break the surface of the classroom. They cannot sit still.
>
> Emotionally, junior high students experience wide swings of mood and deep extremes. When they like something they love it; when they dislike something they hate it. And the loves and hates are transient—best friends speak only to each other or don't speak to each other at all, romances last two days, obsessions are fiercely defended until they give way to new obsessions. (Atwell, 1987, pp. 29-30)

The characteristics of this age group create unique needs, different from those of childhood and those of later adolescence. Early adolescents need to:

- test and discover new skills
- develop a sense of competence, an antidote to the self-doubt of this period
- know that they can speak and be heard, that they can make a difference
- test a developing morality and value structure in authentic situations
- participate in projects with tangible or visible outcomes
- share in making decisions within appropriate parameters
- experience support and sensitive guidance from adults who appreciate their problems and their promise. (Schine, Harrington & Shoup, 1981, pp. 4-5)

While young adolescents are experiencing these pressing developmental needs, communities face new and urgent needs for services, and new ways to reconnect young people to the community and to counteract depersonalization. Happily for young people and their communities, we have come to recognize the congruence of these needs. Young adolescents welcome the opportunity to take on adult roles and make a real contribution. Communities, in turn, are learning to welcome their energy, curiosity and capacity for real accomplishment—a capacity too often unrecognized. By serving in child care centers, communicating with a depressed patient in a convalescent home, clearing and marking a nature trail in a park, guiding strangers in a new neighborhood and participating in literally hundreds of other projects, adolescents discover and practice skills they did not realize they possessed.

We are told that the 1960s gave us the activist generation and the 1970s gave us the "Me" generation. Now, in the final decade of the century, some would have us believe that teens and young adults are the new materialists, living for the moment, acquisitive and self-absorbed. When, however, New York City's Louis Armstrong Middle School offered its 8th-grade students a course on parenting under the "Helper Program," a course that required weekly classes in child development and volunteer work at a child care center twice each week, it was so popular that a waiting list resulted.

When young teens have an opportunity to give expression to their altruism, they will often choose service over the usual recreational activities. In New York City's Forest Hills neighborhood, the 10- to 14-year-olds in the summer vacation program at a local community center made community service a focus of their vacation program. They found a small nearby park that was neglected, strewn with trash and overgrown with weeds. They decided to rehabilitate the site. Together, they cleared debris, planted flowers and, in the course of planning and executing their project, consulted with local police and city council members—learning about how municipal services work.

The early adolescent's desire to participate in community life comes from a curiosity about the world, a need to test the environment and self, and a growing desire to "make a difference." When communities provide opportunities for youth to serve, and to forge new relationships with adults, adolescents will grow and channel their energy. Idealism and altruism are still alive in the world of the young, in spite of media reports to the contrary. As George Gallup, Jr., notes:

> The youth population has been misnamed the self-centered generation. There's a strong desire to serve others. The problem we face in America today is not lack of willingness to serve or to help others, but to find the appropriate outlet for this. (Boyer, 1983, p. 203)

Appropriate Experiences for Young Adolescents in the Community

What are appropriate outlets for young adolescents? Without minimizing their strengths, we need to remember not to expect the consistency of attention or effort that comes in later adolescence. Roles and tasks that have visible outcomes, that are limited in scope but challenging, and that involve cooperative effort are best suited for this age. "During the pivotal years of early adolescence, learners are eager to test new ideas, skills, and talents. At the same time, they want security, understanding and encouragement . . . [These needs] require opportunities for exploration of subjects, abilities, and interests" (The RISE Report, 1975, p. 3).

Child Care Opportunities. Working with young children is an excellent service-learning experience for youth 10 to 14 years old. Not far removed from early childhood themselves, these youngsters seem to develop a special relationship with 3- and 4-year-olds. Recognizing the affinity between young adolescents and small children, the Helper Program launched the Child Care Helper Program as its initial endeavor.

Project evaluation reports over time indicate that the Child Care Helpers start with a somewhat romantic view of early childhood, stating that they chose to participate because they "like children" or "little kids are cute." At the conclusion of the program, they have a more realistic view of the caregiver's role and insights into the meaning of discipline. They develop an increased understanding of their own teachers and parents. One "Helper" reported, "I used to hit my little brothers. But then I thought, if I could keep my hands at my sides at the Center, I could do it at home, too." Helpers derive satisfaction and a sense of achievement from their work: "I feel good about myself because I know I can care for others."

They also gain insights into human behavior—their own, as well as their younger

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charges. One Helper commented at year's end: "I learned that I was once like a child and in some ways I still am."

Tutoring Opportunities. Although working with very young children seems to be a "natural" for many early adolescents, others readily relate to school-age youngsters. The "Youth Tutoring Youth Program" provides opportunities for learning far beyond school-related subjects. "Youth Tutoring Youth" was developed in the late 1960s by the National Commission on Resources for Youth under the aegis of the Neighborhood Youth Corps. Since that time, peer and cross-age tutoring have become increasingly popular in schools, settlement houses, churches and after-school centers. Most of these young tutors serve as volunteers and learn as they teach. When junior high tutors see their advisees' math grades improve, they are every bit as excited as the successful students.

Tutors need not be the academic "stars." In fact, tutoring younger children can help to reinforce the tutor's skills. At a year-end conference, a panel of teachers, Helper Program staff, and school administrators from an intermediate school in New York's South Bronx solemnly discussed the successes and weaknesses of the Helper Program in their school. At the end of the discussion, the moderator asked if the audience had anything to add. Sandy, a 7th-grader, small for his age, immediately waved his hand. "I just want to say I found out that you learn the most when you're teaching someone else," he said. Sandy may have captured, more clearly than many systematic evaluations, a significant feature of service learning: the "service provider" often gains at least as much as the recipient.

Opportunities To Assist the Elderly. The Partners Program, an intergenerational program of the National Helpers Network, exemplifies the reciprocal nature of many projects designed to bridge "the generation gap." Numerous successful programs use older adults as mentors or tutors for adolescents. The Partners Program, however, like the nationally recognized Adopt-a-Grandparent Program, envisions the old/young relationship as a two-way street. Through oral history projects, joint choral concerts, community improvement collaborations or informal group discussions, stereotypes are dissipated and bonds formed.

In New York, Chicago, Los Angeles and other major cities, young volunteers in the Partners Program regularly visit retirement homes and senior citizen centers. For some elderly convalescent home residents, these 12- and 13-year-olds are their only visitors. They may help with light chores or simply visit. In other settings, the young volunteers interview older adults and record oral histories. They may share impressions of the community or trade stories about their own holiday traditions. In our changing neighborhoods, these experiences are often not only intergenerational, but cross-cultural as well. In reaching out, the young learn not only about senior citizens but also about themselves. Their newfound friends find new interest in passing on the knowledge and values acquired over the years, and often have more time for listening to the young. "I used to be afraid of getting old. I thought old people were grumpy and just watched television all day or played bingo . . . I've learned a lot about history, and I'm not afraid to get old anymore" (Learning Is Mutual, 1981, p. 24). When asked what she would miss when she was no longer in the Helper Program, Tanya, a 7th-grade student, wrote, "I'll miss my senior because I think we brought something to her life."

Oral history is an effective strategy for many reasons. An 8th-grade participant in the "Partners Program" wrote, "I had a chance to hear firsthand about the past from someone who experienced it." Above all, it links individuals to each other in new ways:

They'll find something in the person's childhood in common with theirs. They can learn to get along with parents and grandparents better. Elders will also learn that kids are different today than they were when they were young. [But] you'll learn if you look deep enough that teens of then and teens of now are really the same inside. (Deyanira, age 13)

Group Participation Programs for Young Adolescents

Although projects that involve ongoing interpersonal relationships and communication are perhaps the most fruitful for this age group, neighborhood improvement or environmental protection projects can engage the interest and energy of some youngsters who may not be ready for a more intensely interpersonal activity. Group efforts, especially those that entail collaboration and consensus, can be rewarding learning experiences, and some youth will gain confidence and skills and develop a sense of responsibility through such projects. These projects can include neighborhood improvement activities, conservation experiences, and collecting and disseminating information about issues of concern to youth and their communities.

In New York, San Francisco and Chicago, for example, youngsters in the middle grades gather news of interest to their peers and create weekly broadcasts for local cable television. In Indianapolis, Indiana; Oakland, California; Marquette, Michigan; New York City, New York and Washington, D.C., Children's Express News Bureaus, staffed by reporters and editors ages 8 to 18, report on news of particular interest to their peers in a weekly page of the local daily paper. Children's Express, founded in 1975 by the late Robert Clampitt, uses oral journalism to give children a significant voice in the world. In so doing, it not only makes it possible for children to be seen and heard, but also provides its young staff members with an experience in participatory democracy.

In Boston, Massachusetts, Sioux Falls, South Dakota, and Berkeley, California, "Junior Curators" prepare exhibits in local museums. Some young adolescents serve as museum guides or docents for visiting school and scout groups. In one program, the curators are selected from academically talented students in the schools. In another program, troubled youngsters referred by the juvenile court or a family service agency are engaged in these activities; they have won the respect of the training and supervising staff.

Conflict resolution or peer mediation is another model of group service found in schools. This program is a response to the alarming increase in reports of violence affecting every age and every community. Sun Yat Sen Intermediate School, on Hester Street in New York City's Lower East Side, is an example. Hester Street is a changing neighborhood, and the school population reflects this. The school has run a Peer Mediation Program for five years. For the last two years, the classroom course, Resolving Conflict Creatively, has been complemented by a full-fledged Peer Mediation program. The Mediators are nominated by their peers, teachers or themselves, and they go through a careful application process, followed by intensive training. Their fellow students can then seek their help to resolve a dispute; in some instances, school staff may suggest mediation as an alternative to disciplinary action. Mediation sessions are carefully structured; the student mediators are conscious of their responsibility and the need to maintain their neutrality. This is powerful learning for a young adolescent. In their second year, Mediators become Leaders, and, as one of the group explained, "We're there if they get stuck." Participating as a Mediator or Leader is considered service to the school, and it carries rewards of special trips and conferences with mediation teams from other schools.

Whether tutoring, cleaning a polluted stream, working with city officials to equip and staff a playground, or participating in any number of other innovative programs and projects, young people in youth participation programs move closer to responsible roles as citizens and workers.

Important Considerations for Planners and Practitioners of Youth Participation Programs

No program of youth participation in the community is guaranteed success. Planners and practitioners must consider three critical elements when planning projects with and for young adolescents. First, as John Mitchell says, "Work merely for the sake of work is not what youth participation is about. Youth involvement projects which are trivial, boring or non-significant in their societal contribution are not worth the adult energy required to run them" (Schine, Harrington & Shoup, 1981, p. v). The project must have real meaning and intrinsic worth. Second, training and ongoing reflection are essential. Although tradition holds that "we learn from experience," this is not inevitable (Conrad, 1982, p. 5). It is necessary for the experience to be internalized, examined and seen in relation to other experiences before it becomes meaningful. Finally, young adolescents need adult leaders who are understanding, flexible, resilient and patient. They need individuals who understand and enjoy this volatile, confusing, irritating, loving and constantly surprising age group. A sense of humor is perhaps the sine qua non of the adult facilitator's role. "The cardinal rule for early adolescent participation," states Mitchell, "goes like this: projects are successful in direct proportion to the talent and enthusiasm of the adults who supervise them" (Schine, Harrington & Shoup, 1981, p. v).

While the ultimate success or failure of a youth participation program may be unpredictable, some statements can be made with assurance. A community's needs are virtually boundless. The ability of young adolescents to meet those needs has been largely ignored or underestimated. When a "match" is made between the community's needs and the young adolescent's need to participate, develop skills and act responsibly, everyone benefits.

References and Resources

A study of aging. (1983). Binghamton, NY: A community service project by West Middle School. Unpublished report.

Atwell, N. (1987). *In the middle: Writing, reading, and learning with adolescents.* Portsmouth, NH: Heinemann.

Boyce, M., & Carper, E. (Winter, 1980). Combining forces with 4-H. *Synergist, 8,* 34.

Boyer, E. L. (March, 1993). *In search of community.* Speech delivered at ASCD Annual Conference, Creating Learning Communities.

Cherry, F. (1984). *Caring: A guide for 4-H leaders and 4-H club members in 4-H community projects.* Ithaca, NY: Department of Human Development and Family Studies, New York State College of Human Ecology, Cornell University.

Conrad, D. (1982). *Learning from the field experience: A guide for student reflection in youth participation programs.* New York: National Commission on Resources for Youth.

Kagan, J. (1981). The moral function of the school. *Daedalus, 13,* 151-164.

Konopka, G. (1973). Requirements for healthy development of adolescent youth. *Adolescence, 8,* 31.

Learning is mutual, The. (Fall, 1981). *Synergist, 10,* 24-26.

National Commission on Resources for Youth. (1974). *New roles for youth in the school and the community.* New York: Citation.

Oliver, D. C. (1976). *Education and community: A radical critique of innovative schooling.* Berkeley, CA: McCutchan Publishing.

RISE Report, The. (1975). Sacramento, CA: Report of the California Commission on the reform of intermediate and secondary education.

Schine, J. G., & Harrington, D. (1982). *Youth participation for early adolescents: Learning and serving in the community.* Bloomington, IN: Phi Delta Kappa Fastback No. 174.

Schine, J. G., Harrington, D., & Shoup, B. (1981). *New roles for early adolescents.* New York: National Commission on Resources for Youth.

Sitton, T., Mehaffy, G. L., & Davis, O. L., Jr. (1983). *Oral history: A guide for teachers and*

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others. Austin, TX: University of Texas Press.

Sizer, T. R. (1985). *Horace's compromise: The dilemma of the American high school.* Boston: Houghton Mifflin.

Youth: Transition to adulthood. (1973). Washington, DC: Report of the Panel on Youth of the President's Science Advisory Committee.

Learning in Your Own Backyard

Anthropologist Ashley Montague (1975) has suggested that the most important job in the world is to give roots and wings to another human being. These "roots" and "wings" come from nurturing families who guide their children through many meaningful activities. One-to-one relationships with adults in informal learning experiences give children the personal touch needed to nourish their "roots" and "wings." Or, as White (1979, p. 4) dramatically states, "the informal education that families provide for their children makes more of an impact on a child's total educational development than the formal education system." If this is the case, how can families identify and capitalize on valuable informal learning opportunities?

Planning Is Important

Informal learning opportunities can be as simple as accompanying a parent or caregiver on daily errands to the office, shopping center, barber shop, grocery store, post office, bank or pharmacy. The greatest value will be gained when the excursion is preplanned. Thought should be given to words, concepts and relationships that may be discovered and the questions that children may ask.

Allow plenty of time, and remember to be patient and flexible, and to have reasonable expectations. Where appropriate, adults should "play" alongside youngsters. Informal learning generally involves significant social contact between learners, and language is a critical component in such socially mediated knowledge construction (Dierking & Falk, 1994). Children should always be encouraged to verbalize their experiences since the amount of conversation children have with adults directly affects their intellectual development (Bower, 1996).

When creating products such as art projects or written works with children, the emphasis should be on the process, not the final product. Children need to experiment with materials. Creating something of lasting value is less important than discovering what can and cannot be accomplished with the materials. Expensive and elaborate materials are neither necessary nor desirable, but the safety of the items must be considered. Adults will want to be sure items are not dangerous (i.e., sharp, toxic or glass), especially for young children.

Linking Informal and Formal Learning

Most people seem to regard the learning that occurs at school, and learning that takes place at home and in other informal settings, as largely unrelated (Rosenthal & Sawyers, 1996). In contrast to the rich social interactions that can be observed in most informal learning activities outside of the school, many American classrooms feature a teacher-centered "culture" that is neither open to much social interaction among students, nor rich in student-generated communication. Because children must divide their time among home, community and school environments, both scholastic and behavioral problems can be anticipated when these three learning contexts are dramatically mismatched. In response to this difficult situation, education leaders at the local,

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state and national levels have sought to build collaboration among schools, families and communities (e.g., U.S. Department of Education, 1994).

Parents and other family members can help link the learning that their children experience at home with the teaching that goes on at school by simply becoming more aware of, and involved in, their school's programs (Brand, 1996). By volunteering to serve as a homeroom helper, workroom aide, playground monitor or other school partner, parents can become more involved. Organizations like parent/teacher associations and community education councils are also ways for parents to stay in touch with what is going on at their community or neighborhood school.

Another strategy employed by schools nationwide to foster family/school/community interaction is the presentation of family-oriented extracurricular learning opportunities. Programs such as "Family Math" (Stenmark, Thompson & Casey, 1986) and "Family Science" (e.g., Northwest Equals, 1990) have been shown to provide excellent opportunities for social informal learning. If these types of programs are not currently available in a community, families can organize support to develop such family-based learning opportunities. If family programs are available, adults should make every effort to take advantage of them.

Some Additional Out-of-School Learning Activities

Parents can also play an important part in their children's formal education by providing out-of-school experiences that build upon the lessons learned in the classroom. Parents may modify the following activities to accommodate children of various ages and abilities:

Activity	**Family Awareness: Who Am I?**
Objectives	To enhance the child's self-esteem To enable each child to understand and appreciate his or her special place in the family To provide each child with an understanding of his or her personal history and family heritage
Materials	Camera and film Folder or album for pictures Labeling materials Family pictures, records, mementos
Procedure	Label pictures of family members with names and ages. Note the location of the photograph and date of the picture. Also note interesting information about the photo; for example, "This was our first camping trip," or, "Thanksgiving at Grandma's house." Provide a special place in the family album for each child. As the children mature, encourage them to select pictures that they believe should be placed in the album. Over time, the family photo album can provide for many hours of interesting dialog.
Extending Activities	Compile a record of the height, eye color, hair color and other physical characteristics of family members. Have the child compare and make generalizations about similarities in the family. Use history books and state and local archives to identify historical information about family members or about the places family members lived. These activities will personalize the past for children and provide a permanent record of the relationship with the family.

Activity	**Map-Making and Reading**
Objectives	To draw a simple map To use the map to locate items and places around the home
Materials	Paper, pencils, ruler Colored pencils, markers, or crayons Floor plan of your home (optional) Maps of your city, state, county
Procedure	Have the child draw a map (floor plan) of his or her room. Place furniture, windows and doors in the appropriate places. Then, hide a "treasure" in the room. Use the child's map to give clues for finding the treasure. As the child becomes skilled in the use of the room map, expand the activity to include a map of the entire house. Continue with the same kind of activity. This experience can be continued in the yard and neighborhood.
Extending Activities	Have a scavenger hunt in which several children can locate a hidden "treasure" by reading the map and following clues. Older children may use city maps to identify homes of friends, the school or a favorite place to go. Another mapping experience might be to plan the route for the family vacation and help with navigation on the trip. Using maps to locate stores in a shopping mall or exhibits in a zoo or museum are other map reading opportunities commonly available to families.
Activity	**Planning a Family Excursion**
Objectives	To promote map reading and mathematical skills To provide opportunities for authentic reading/writing experiences To promote a positive self-concept
Materials	Maps, travel brochures, pencils and paper, ruler
Procedure	Have children help plan a family trip or vacation. With adult guidance, children can calculate the mileage of the trip, determine best possible routes and identify roadside attractions for viewing while traveling. Older children can also calculate expenses such as gasoline costs, meals, etc.
Extending Activities	Most chambers of commerce will supply, free of charge, extensive information regarding their community. Have children write for free tourist information prior to the trip. This will allow children to use reading and writing skills for an authentic purpose.
Activity	**"Bathematics"**
Objective	To provide children with opportunities to measure volume Language development Motor skills development
Materials	Plastic containers of various shapes and sizes, various water toys, objects for "float or sink" explorations
Procedure	Bath time also can be a learning experience. Young children can explore concepts such as the relationship of shape to volume. By first predicting which objects will sink or float, concepts such as volume, surface area, density and buoyancy are explored.

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Extending Activities

Children can use the same measuring concepts in other out-of-school activities, including cooking and baking with a parent, gardening, making "mudpies" and building sand castles. In turn, all of these activities provide an opportunity for more bathematics!

Activity **Cooking Fun**

Objectives

Following directions
To practice measuring skills
To promote positive self-concept

Materials

Various cooking utensils and ingredients
Recipes or cookbook

Procedure

Cooking provides opportunities for children to follow written and oral directions, collect and organize materials and ingredients, and measure accurately. Cooking and sharing food with family members can also help children develop feelings of self-worth and accomplishment. Cookbooks especially designed for sharing with children are available at most bookstores. Parents should remember always to practice safety when cooking with children.

Extending Activities

Have children write up their favorite recipes.
Illustrate and bind these recipes to form a personal cookbook.

Activity **Refrigerator Ready Reading**

Objectives

To provide opportunities for the child to record their experiences
To facilitate language development and usage and improve memory

Materials

Paper, pencils, crayons or markers
Small magnet or magnetic strip (available at craft stores)
School glue
Small objects collected on a hike or trip

Procedure

While on a hike or other excursion, collect one or two small mementos of the event. On a trip to the shore, for example, the parent and child might collect several small seashells (make sure they are empty!). Upon arriving home, use the shells, glue and magnets to construct one or more refrigerator magnets. While the glue dries, have the child draw a picture and/or write a short paragraph describing the trip to the beach. Children who cannot yet write can dictate their stories for the parent to record. When the magnet is ready, attach the story to the refrigerator or other metal surface. Over the next few days, have the child recall the experience by showing him the picture/story and asking questions such as, "What can you remember about this day?" As new outings take place, new stories and magnets can be completed.

Extending Activities

Save the "old" stories to construct a journal of the child's adventures. Individual pages can be collected in an appropriate folder or album. This journal will provide opportunities for many rainy day discussions.

Activity **Weather Calendar**

Objectives

To observe and record patterns in environmental data
To construct charts and graphs of data
Vocabulary development

Materials	Wall calendar Colored pencils, crayons or markers Graph or grid paper with large grids Outdoor weather instruments (optional)
Procedure	Observe weather conditions each day and record observations on the calendar. If weather instruments such as a thermometer, barometer, rain gauge or wind vane are available, record each measurement daily. If no equipment is available, simply record data such as wind direction, approximate wind speed, precipitation or general atmospheric conditions (e.g., cloudy, partly cloudy, clear). At the end of a week or month the parent and child can construct a graph or chart summarizing the observational data.
Extending Activities	Keep a general "science stuff" calendar containing information such as types and frequency of birds visiting a feeder, moon phases, daily sunrise/sunset times and general gardening/plant data, such as planting days and sprouting days.

A Word About Nature Study

Americans have long recognized the value of including nature study as a component in the education of young children (e.g., Bailey, 1909, Comstock, 1911; Fenton, 1996; Rivkin, 1995). By interacting with the natural world, humans construct "stories or interior road maps to represent our personal experiences and/or understandings of the world around us" (Wilson, 1996). Our early experiences with nature become the fabric of "inner landscapes" (Sebba, 1991) that eventually compose our "ecological self" (Mathews, 1991). Throughout our lives it is this ecological self that guides our perceptions of, attitudes about and interactions with the natural world. Howard Gardner has labeled this characteristic of all humans as the "naturalist" intelligence (1996). Both the quantity and quality of a child's experiences with the environment are thought to greatly affect their subsequent interactions with nature (Wilson, 1996). With a world population that could double in the next 50 to 60 years (Zero Population Growth, 1988), it is easy to recognize the importance of providing children with a wide variety of experiences with nature.

Fortunately, opportunities for families to interact with the environment are as abundant as nature itself. It is possible, for example, to have wonderful encounters with a large number of plant and animal species in one's own backyard. Activities like plant and flower identification, leaf pressing and/or printing, insect and bird watching and identification, bird feeding, and observing patterns in weather or seasons can provide families with numerous interesting experiences to discuss.

By following up on such outdoor activities with related reading and writing experiences, adults can greatly increase both the quality and quantity of learning that takes place. A session of bird watching, for example, can lead to a trip to the local library to find books about birds. While there, the child is also introduced to the library's large number of materials that relate to different concepts and cultural practices that are characteristic of libraries. Returning home, the parent and child can share a book, draw a picture, and/or write (younger children can dictate) a short story or journal entry about the day's events. This story can then be displayed on the refrigerator or in some other suitable location, and can be shared with the child in coming days. As mentioned previously, such "refrigerator ready reading" can be an important addition to almost any activity.

Gardening is another wonderful way to share nature with children (e.g., Clemens, 1996). Young children seem to possess a natural curiosity about their environment, and

gardening provides a way to nurture this curiosity. By giving children a chance to enjoy growing plants, parents can provide opportunities for intellectual and emotional growth that would be difficult to provide otherwise. In a garden, children can learn to use both knowledge and tools, and they can also learn the joy of working cooperatively with others. A garden also provides opportunities to observe and discuss the insects, birds and other animals that coexist with the plants. Experiences such as these can lead to interesting adult/child discussions, and also can be used to encourage reading and writing.

Although it is desirable to have a backyard or some other open space to grow a garden, a large space is not needed. Many city dwellers grow lovely gardens in containers. A large number of fine books describe creative ways for adults to enjoy growing plants with children, regardless of the amount of space available.

More Captivating Activities

These additional activities provide opportunities to expand children's vocabulary; promote fantasy play, role-playing and inquiry; discover the characteristics and properties of objects; promote independent actions, decision-making and planning skills; and encourage positive social behaviors.

Backyard Bubbles: Mix one tablespoon of dishwashing liquid with 1/2 cup of water to make a bubble solution. Pour into a dishpan, washtub, etc. Use straws, bubble pipes and common materials such as the plastic rings from six-packs of soda to make bubbles. Food coloring also can be added.

Water Painting: Provide a container of water and a paint brush. Let the child paint the sidewalk, fence or other outside objects. Then let the child watch his or her artwork "disappear."

Dressing Up: Provide children with grown-up clothing for pretend and fantasy play. Items to include: high heels, dresses, wigs, scarves, jewelry, hats of all kinds, boots, shirts, belts and a mirror for viewing. Older children will enjoy planning a style show or imitating their favorite celebrity.

Planning a Tea Party: Allow children to help prepare the food. Younger children can make non-cooking items like crackers and juice or non-bake cookies and snacks. The tea party can include more elaborate recipes for older children. Ask for children's cookbooks at the library. Encourage children to decorate and set the table.

Doing a Good Deed: Help children surprise someone in the family or neighborhood with a "helping hand." This might include setting the table, carrying out the trash for a sick friend, delivering the paper to the porch, feeding the neighbor's pet, watering the plants while someone is on vacation, etc. It is never too early to nurture caring skills.

Indoor Picnic on a Rainy Day or Outdoor Picnic on a Sunny Day: Children should have the opportunity to help with meal planning, table setting and clean-up. If it is windy, take along a kite.

In conclusion, we believe families have unlimited opportunities to promote children's learning in the confines of their home or backyard. This one-to-one relationship in informal settings offers the personal touch needed to provide children with rich and meaningful experiences.

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References

Bailey, L. H. (1909). *The nature study idea.* Norwood, MA: Norwood Press.

Bower, B. (1996). Talkative parents make kids smarter. *Science News, 150,* 100.

Brand, S. (1996). Making parent involvement a reality: Helping teachers develop partnerships with parents. *Young Children, 51*(2), 76-81.

Clemens, J. B. (1996). Gardening with children. *Young Children, 51*(4), 22-30.

Comstock, A. B. (1911). *Handbook of nature study.* Ithaca, NY: Cornell University Press.

Dierking, L. D., & Falk, J. H. (1994). Family behavior and learning in informal science settings: A review of the research. *Science Education, 78*(1), 57-72.

Fenton, G. M. (1996). Back to our roots in nature's classroom. *Young Children, 51*(2), 8-11.

Gardner, H. (1996). Speech presented at the annual conference of Texas Association for Supervision and Curriculum Development, El Paso, TX.

Mathews, F. (1991). *The ecological self.* Savage, MD: Barnes & Noble.

Montague, A. (1975). *Culture and human development.* Englewood Cliffs, NJ: Prentice Hall.

Northwest Equals. (1990). *Family science* (draft). Portland, OR: Portland State University.

Rivkin, M. (1995). *The great outdoors: Restoring children's right to play outside.* Washington, DC: National Association for the Education of Young Children.

Rosenthal, D. M., & Sawyers, J. Y. (1996). Building successful home/school partnerships: Strategies for parent support and involvement. *Childhood Education, 72*(4), 194-200.

Sebba, R. (1991). The landscapes of childhood. *Environment and Behavior, 23*(4), 395-422.

Stenmark, J., Thompson, V., & Casey, R. (1986). *Family math.* Berkeley, CA: University of California.

U.S. Department of Education. (1994). *Strong families, strong schools: Building community partnerships for learning.* Washington, DC: Author.

White, B. L. (1979). *The first three years of life.* Englewood Cliffs, NJ: Prentice Hall.

Wilson, R. A. (1996). The earth: A vale of soul making. *Early Childhood Education Journal, 23*(3), 169-171.

Zero population growth. (1988). *Teacher's PET term paper.* Washington, DC: Zero Population Growth.

Resources for Parents

Klutz Press. (1987). *Kids cooking: A slightly messy manual.* Palo Alto, CA: Author. ISBN 0-932592-14-7.

Ocone, L. (1987). *The youth gardening book.* Burlington, VT: National Gardening Association.

Sebba, R. (1991). The landscapes of childhood. *Environment and Behavior, 23*(4), 395-422.

Sisson, E. A. (1982). *Nature with children of all ages.* New York: Prentice Hall Press. ISBN.0-13-611542-X.

Spizman, R. F., & Garber, M. D. (1991). *What on earth you can do with kids.* Carthage, IL: Good Apple Books. ISBN 0-86653-623-X.

United States Department of Education. (1992). *Helping your child learn science.* Washington, DC: Author. ISBN 0-16-040412-6.

The Family As a Resource for Learning

No matter the size of the family, who the members are, whether or not they are new to the country, the power of the family in children's life and learning is unequaled and undisputed (Maccoby, 1992; Smetana, in press). The family long has been considered the child's first and foremost teacher. This chapter focuses on the family as children's primary community for learning. Nevertheless, both family and school are involved in children's education. Furthermore, teachers can utilize the family as a resource for children's learning in school.

The Family As Resource for Learning in the Present

It is through the family that children learn who they are and what they can become. From the moment of birth or even before, family members perform provide the care and nurturing that shape children's lives. The way parents interact with their children, attach to them and use language informs children of their worth, dignity and value as human beings. "Oh, what a strong, little man," coos one mother on seeing her infant son for the first time as he is being placed on her abdomen. Another mother says, "Hello there, you beautiful girl," while yet another cuddles her newborn daughter, saying, "What a smart little baby you are."

Each parent, while sending different messages, attributes to their newly born infant the characteristics valued by them and the culture. By doing so, parents begin the process of teaching and shaping children to meet their expectations and those of society. Whether positive or not, these interactions allow children to develop a sense of who they are, as well as their role in the world.

These interactions that shape children's sense of self are the foundation on which children will learn to interact and relate to others. Children who have experienced the love of caring family members, and who know they are worthy, will feel secure and confident. Because they know who they are, they are able to reach out to share with and care for others (Erikson, 1963).

Families find more explicit ways, as well, to teach children to care for and share with others. Some families have found that the celebration of Thanksgiving offers them the opportunity to teach children to share with and care for others. One family, after their Thanksgiving meal, asks each member to draw or write about their wish for the world. The parents know that these wishes will not stop world hunger or bring peace to a troubled land, yet it was one way they ask their children to think of others. Other families involve their children in serving food to the homeless, inviting people new to the country to their Thanksgiving dinner, or visiting elders in a nursing home.

Throughout the period of childhood, children's daily activities and interactions with family members serve to inform them of their role in their society. "Can I help you?"

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asks 5-year-old Shawna, watching her grandmother set a table. "Why, thank you," replies the grandmother, "I need help." "Well, then will you help me help you because I don't know what to do," answers Shawna. "We put the forks here and the napkins like this," her grandmother tells her. By learning to set a table and participating in other daily activities and routines of the family, children are like apprentices learning the "shoulds" and "should nots" of the culture (Rogoff, 1995).

Today, however, others supplement the role of the family in teaching children who they are and what they can become. More than 71.5 percent of all children attend some form of care or early education program outside of the home prior to entering the 1st grade; nearly 95 percent of all 5-year-olds attend kindergarten, and nearly 100 percent of all children attend elementary school (U.S. Department of Education, 1995). In these settings, teachers and adults other than children's parents inform children of their basic worth and dignity. The tacit and explicit messages of the school must continue to build children's sense of themselves as competent persons who are basically good, lovable and caring.

If the school is to expand and extend the role of the family in guiding children's participation and apprenticeship into the culture, then all children must feel included in the school's culture. Children new to the United States, as well as those who are members of minority groups who have inhabited our country for generations, should be given genuine respect. Girls, as well as boys, must be praised not just for the effort they put forth, but also for their basic worthiness (Sadker & Sadker, 1993).

A marked difference exists, however, between the apprenticeship education children receive in their family and what they receive in school. Once in school, the natural ways children learned in the home are disrupted. School, whether group child care, kindergarten or an elementary grade, is removed from children's daily life and practical living. Instruction may become more didactic, stilted and removed from meaningful activity.

Dewey (1944) was troubled by the difference between the natural ways children became apprenticed in the culture of home versus the school's methods. He believed that what happens in a school is in danger of being isolated from the subject matter of life experiences. Schools can prevent this from happening in at least two ways. They can implement a project-oriented curriculum that emerges from children's experiences in their family and community; and, they can use the family as a resource for children's learning.

Emergent Project-oriented Learning

Years ago, teachers were a part of children's communities. They lived in the same neighborhoods, shopped in the same stores, and attended the same churches and synagogues as the children they taught. Because they did so, it was easier for them to place children's learning at school in the context of their learning through the family and community. Today, because children and teachers often live in very different communities, with very different experiences, it takes more effort to ensure that school learning is not isolated from that which takes place in the family.

Teachers who want to continue apprenticeship learning in the classroom will need to be knowledgeable of the learning that takes place in children's family and community. To do so, they may take walks or drive through children's neighborhoods. They should note the physical nature of the area, places children seem to enjoy gathering or playing, historic aspects of the neighborhood, places of business, or neighbors who seem to have special interests or hobbies. Lucy Sprague Mitchell (1934) described it this way, "It is the school's job to begin with the children's own environment whatever or wherever it may be" (p. 16).

Less concrete than the physical environment, but perhaps even more important, is knowledge of children's cultural environment. Through informal conversations with children's families, teachers can gain an understanding of the families' traditions, customs, language, special foods, types of celebrations and values. When teachers are committed to learning about other cultures, and are sincere in their interest, parents are generally open to revealing their cultural values.

The Family As Resource

Using the family as a resource for children's learning helps bridge the gap between the children's natural ways of learning in the family and those they use in school. All the content, attitudes, values and skills included in many subject areas of the curriculum could be fostered through study of the family. Sociology is brought into play as children describe their family and compare their families with those of other children. Mathematics is necessary if children are to identify the oldest and youngest members of their families, and determine how many years older or younger they are than these members.

The family also is a resource for the study of history. While interviewing their parents or older family members, childen can note the changes that occurred in their family over the years. They could ask about important life events and life styles of the past, and place these events within the context of the important historic events that were taking place at the time. Charting where the family lived, and how and where they traveled, gives children experience with geographical content. Economics is the base for examining the types of jobs family members hold or have held.

Language is another area of study that can unite home and school learning. If educators and caregivers can communicate with children in their home language, even if only a few words, it shows children that they, and their family, are respected and valued. Reading and discussing books is another way to involve children in a variety of cultural backgrounds. Aardema's *Bringing the Rain to Kapiti Plain* (1981), a folk tale from Kenya, is a good way to open discussions on family life in Kenya. De Paola's *Watch Out for the Chicken Feet in Your Soup* (1974), a story of acceptance of a child's Italian grandmother, could lead to related activities, such as making a bread doll or collecting children's family recipes.

Other books, such as *Weddings, The Baby Book, The Mommy Book* and *The Daddy Book* by Morris (1995), *Stepfamilies* (Myers, 1995) and *When You Were a Baby* (Lewis & Lewis, 1995), are useful resources for children's learning. Reading these might motivate children to write their own books and stories about their family. Children could write about the history of their family, their favorite family activities, or members of their family who hold special significance to them.

Although the family is the primary source of children's learning who they are, it is obvious that the school also is responsible for helping children feel confident and secure. By working together with families, and building on what children have learned in the family, schools can ensure that all children feel included, respected and prepared to live fully in the present.

Learning About the Past: Shared Meanings and Culture

Interactions with their own family may be the only way that children learn the traditional ways of living and working together in a society. The family begins the process of teaching children the shared meanings and shared modes of discourse for negotiating meaning that make it possible for people to live together (Bruner, 1990).

A child's emergence into the family structure could be likened to an actor walking on stage "into a play whose enactment is already in progress" (Bruner, 1990, p. 34). But

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the family on the stage has a sense of what the play is about. The older family members teach the children their role by involving them in narratives of the past, as well as passing along the celebrations and traditions that enable children to take their own place in the family and the larger culture of their community.

The Power of the Narrative

Through the remembering, telling and retelling of past events, children are informed of the beliefs, values, expectations and hopes of their family and culture. Narratives, composed of a unique sequence of events involving people, may or may not be truthful, but are always inherently interesting to children. Who hasn't heard a child plea for "just one more story about the olden days, when you were little"? Children are comforted, and gain a sense of permanence and family security, as they listen to stories of their grandmother serving fish cooked with raisins and gingersnap gravy, because that is what her grandmother fed her when she was a little girl, or hearing how a grandparent faced hardships when immigrating to America.

It is not just narratives of the long ago that interest children, but also the stories of their immediate past as well. "Do you remember last year at the beach when the crab hung onto Shawna's finger and she shook it off and it fell into the bucket?" Or when two sisters tell and retell the story of the day they read *Little Women* together and cried over Beth's death. "We held each other so tight, but we still couldn't stop crying," they reminisce.

Schools can use the family as a resource for learning by building on children's natural interest in narratives. Past the age of 7 or 8, children can be introduced to the methodology involved in conducting an oral history. Conducting an oral history is relatively straightforward, even though some preparation is necessary. The process might begin by asking children to make tapes or booklets of their own lives in which they record the date of their birth, their first memory, the happiest moment in their lives (as well as the saddest), and details of meaningful events. From the base of creating their own narratives, children can branch out to conduct oral histories with other members of their family—parents, aunts, uncles, grandparents, cousins—or other members of their school community or neighborhood.

You and your children could develop an interview outline with questions and spaces for responses. Or, children could use the questionnaire as a prompt and record responses on video- or audiotape. Standard questions ask people to recall the important dates and places of their lives, such as when they were born, and when and where they began and finished school, when they were married and when family members died. Children might also ask older family members or friends to tell about the jobs they held, the things they do now, their hobbies and the things they collect. Children enjoy listening to older people tell about the games they played when they were young, whom they played with and what rules were followed.

Questions that prompt people to recall their feelings along with the facts are less standard: "How did you feel when your sister was born?" "What did you think about as you were marching out of Korea in the winter during the Korean War?" "Have you ever felt that way again?"

Encourage children to use photographs and memorabilia in conducting an oral interview. Baby pictures, photographs of grandma and grandpa's wedding, a worn photo of a great aunt in uniform, a piece of old quilt, or a family menorah help people reminisce and tell the stories of their past.

As they conduct an oral history, children are exposed to any number of important facts and information in addition to the culture, traditions and belief systems that are a part of their families' past. They use mathematics as they compute time lines, or deter-

mine how long ago an event they have recorded took place, or how old they or their parents were at the time. Important places can be located on maps and globes. Salient historical events—world wars, disasters or scientific breakthroughs—can be placed in the context of children's family history. One 5th-grade teacher asked each child to begin an historic journal of their lives. She had children record the year of their grandparents', parents' and their own births, and to find out what events were taking place at the time. She continued the project by asking children to find out what was happening in the world at different points in time during their families' lives.

Traditions—Another Way To Teach Shared Meanings

A family's history, the way they celebrate holidays and birthdays, even the way the family structures daily routines, all involve children in culturally valued activities. As children participate in their families' traditions, they are being inculcated into the culture; they are learning and gaining cultural and social values (Rogoff, 1995).

Continuity between past and present is built when elder family members are involved in traditional family celebrations. The elders can demonstrate traditional ways of celebrating life events or holidays, or tell how a family custom came about. In one family, a cake mold in the shape of a lamb was passed down from great-grandmother to grandmother to mother and, finally, to a granddaughter, along with great-grandmother's handwritten recipe for the cake. The birthday of each family member is celebrated with a Lamb Cake.

One 60-year-old woman told about comforting her grandson, who was fearful of staying overnight with her for the first time. "You know," she told him, "it's a tradition in our family, when we're feeling blue or tired, to cheer one another up with a snack of cinnamon toast and cocoa."

Teachers can build traditions in their classrooms, as well. One teacher began the custom of having the children make class booklets. Over the year, the teacher made certain that each child was recognized. When a child accomplished a task or mastered a skill, all of the children drew and wrote a congratulatory page for the child's book. The birth of a sibling, the death of a grandparent and other family life events were recognized in the class booklets.

The values and meanings that hold a nation together are internalized as children from diverse cultural backgrounds celebrate national holidays. Recognizing Columbus Day, Martin Luther King Day, Presidents' Day, Memorial Day, Arbor Day and Earth Day through a special ceremony or common activity is an important part of the school curriculum. Because of religious beliefs and values, controversy may exist over the celebration of these holidays. Celebrations for such holidays as Thanksgiving, Christmas or Chanukah, even for children's birthdays, Halloween and Valentine's Day, must be carefully planned and "thoughtfully used as a part of a more inclusive curriculum about cultural diversity" (Derman-Sparks & the ABC Task Force, 1989, p. 86). Meaningful holiday celebrations can be accomplished by asking what children are learning through these celebrations, and also asking how their families can be involved and how the experience can be broadened to foster children's awareness of their own and others' cultural experiences.

The Family: A Resource of Learning for the Future

If, as Bruner (1990) suggests, the family is the "vicar" and microcosm of the culture, past and present, then the family is also the "vicar" of the future. Children must learn, beginning with family members, that they are worthy, valued human beings. Only then will they be able to face an unknown future with confidence and assurance.

Teachers, based on their knowledge and understanding of the culture of the home,

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can develop an inclusive curriculum that welcomes all children. Through an inclusive curriculum children, regardless of ethnicity or culture, will find themselves as if they were looking in a mirror (Rich, 1989), and know they have an important place and role to fulfill in society.

Both family and school inculcate children into the culture of today by transmitting the values and beliefs of the past. Communication with family members, linked with a joint, coordinated activity at school, engages children in some sort of meaning making. Doing this transmits cultural practices, indeed the culture itself, and shows that it is valued (Rogoff, 1995). The stories family members tell do this as well. Through the remembering, telling and retelling of narratives from childhood, children are brought in touch not only with facts about history and traditions held within the family, but also with the beliefs and expectations embedded in these stories. Honoring family beliefs and expectations and melding them, when possible, with broader societal beliefs and expectations allows each child to find his place and role. It is through transmission of these beliefs that children learn ways of behaving and experiencing life fully (Bandura, 1993).

In today's fast-paced world of ever-changing lifestyles, it is important for families to find innovative ways to keep traditions and their personal history alive. The love and caring that go along with celebrations and traditions comfort children with a sense of permanence.

Children also need to feel a sense of permanence and belonging while at school. Schools can find ways to build new traditions and celebrations by creating narratives that will serve this purpose. Each group of children has a history that can be told, retold and recorded in words, music or art. The telling and retelling of the events of their life at school, and the celebration of school traditions, are just as important as the narratives of their home life.

Finally, schools' role is greater than simply involving families in children's learning in school. Families need to be supported in the difficult, complex job of child rearing. When schools and families work together to make certain that every child experiences all the life cycle has to offer—ensuring that every child has been nurtured and cared for during infancy, that each feels a part of the traditions and culture of the past, and that each child has the opportunity to taste all the joys life holds in the present—then children will be prepared to live life fully in the future.

References and Resources

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist, 28*(2), 117-148.

Bruner, J. (1990). *Acts of meaning.* Cambridge MA: Harvard University Press.

Derman-Sparks, L. & the ABC Task Force. (1989). *Anti-bias curriculum: Tools for empowering young children.* Washington, DC: National Association for the Education of Young Children.

Dewey, J. (1944). *Democracy and education.* New York: The Free Press.

Erikson, E. (1963). *Childhood and society.* New York: Norton.

Maccoby, E. E. (1992). The role of parents in the socialization of children: A historical overview. *Developmental Psychology, 23,* 1006-1017.

Mitchell, L. S. (1934). *Young geographers: How they explore the world and how they map the world.* New York: John Day Company.

Rich, A. (1989). Invisibility in academe. In R. Rosaldo (Ed.), *Culture and truth: The remaking of social analysis* (p. ix). Boston: Beacon Press.

Rogoff, B. (1995). Observing sociocultural activity of three planes. In J. Wertsch, P. del Rio, & A. Alvarez (Eds.), *Sociocultural studies of the mind* (pp. 139-154). Cambridge, MA: Harvard University Press.

Sadker, M., & Sadker, D. (1993). *Failing at fairness.* New York: Simon & Shuster.

Smetana, J. G. (in press). Parenting and the development of social knowledge reconceptualized:

A social domain analysis. In J. E. Grusec & L. Kuczynski (Eds.), *Handbook of parenting and the transmission of values*. New York: Wiley.
Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
U.S. Department of Education. (1995). *Conditions of education*. Washington, DC: Government Printing Office.

Children's Books

Aardenam, V. (1981). *Bringing the rain to Kapiti Plain*. New York: Dial.
de Paola, T. (1974). *Watch out for chicken feet in your soup*. New York: Prentice-Hall.
Lewis, D. S., & Lewis, G. (1995). *When you were a baby*. New York: Peachtree.
Morris, A. (1995). *The baby book*. New York: Silver.
Morris, A. (1995). *The mommy book*. New York: Silver.
Morris, A. (1995). *The daddy book*. New York: Silver.
Morris, A. (1995). *Weddings*. New York: Silver.
Myers, S., & Sanders, P. (1995). *Stepfamilies*. New York: Cooper.

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Learning Options with Personal Computers: Now and in the Future

The use of personal computers in school is a source of great concern for educators. While those involved in formal education have been debating the value of computers, how to use them and what should be taught with them, personal computers have been proliferating in settings beyond school walls. We find them being used as learning devices in homes, museums, libraries, malls, food stores, amusement parks and elsewhere. Outside of formal constraints, personal computers can be easily used as a tool or as an invitation to explore and learn.

The quick and easy adoption of personal computers into our lives may be related to the toy status of the early microcomputers, or it may be related to the "point and click" interface of the newer machines. In any case, these tiny machines seem to invite users to touch them even when they are turned off. The non-threatening nature of the machine presents an open invitation to press a key on the keyboard or to touch a screen to see if something will happen. While waiting to make a connection in an airport recently, I observed two children using the public touch screen to explore tourist sights available in the city. As people strolled by they would stop, gaze at the screen for a moment and touch it. The machine is inviting because we know something different might happen. This is the attraction that personal computers share with well-designed toys. We expect to find pleasant action when we do something with the toy.

In its short history the personal computer has been viewed as having a variety of purposes. Early microcomputer products (c. 1981-82) seemed to have been purchased for many reasons (e.g., family business, convenience, high-tech home management). The next wave of marketing for personal computers (c. 1986-90) focused on education and entertainment. Unscrupulous advertisements suggested that without a home computer your child would flunk out of college or fail to secure a position in management. Parents enrolled their children in my computer classes because they wanted their children to be ahead of their peers in using computers. I was frequently asked if the children will "learn skills to help them become computer programmers." The most recent wave has broadened the education and entertainment emphasis (via Internet surfing) and has provided excellent software for budget planning, tax preparation, tracking stocks, banking, video and audio uses, and many hobbies. Clearly, the trend is moving away from programming the computer to learning other computer skills (e.g., keyboarding, organizing and designing presentations, communicating). More and more families consider the computer to be a useful tool, yet they have great concerns about the potential misuses of that tool.

Computer As Tool

Computers today come "bundled" with a great variety of software, including word processing programs, communications software, Internet access, games, information

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and computer functionality. In addition, enormous amounts of shareware (software that is purchased after a trial period, usually at a nominal price) are available for downloading from the Internet. This means that the modern microcomputer provides tools only hinted at by earlier incarnations.

Word processing has virtually replaced the typewriter. In a recent visit to an Israeli university I could find only one typewriter on the campus. Spell checkers, grammar correction and on-line thesauruses are common tools in most word processors. At home, word processing enables children to write and edit with ease. The educational benefit of text edition is that it carries the potential for writers to become more aware of their writing and, therefore, become better writers (Jones & Pellegrini, 1996).

Multipurpose programs designed especially for children allow them to write text, draw illustrations and record their voices. They can easily create slide shows of their text and illustrations. My daughter is particularly fond of creating greeting cards and "advertisements" for her various ventures, using such software. She has, through her own initiative, created slide shows, complete with a recorded explanation, simply for the joy of creating with the computer tool.

This multipurpose environment provides a wonderful "what if" playground for the family. Family members can engage in an ongoing story writing project in which each member adds to the story and illustrations. Various versions can be tried simply by saving and changing text and illustrations. Because of the "undo"-function found in most word processing software, you can always try something and revert to the previous version if you do not like the results. Alternatively, you can reload an earlier version of the file.

Information stored on CD-ROM is replacing the home/library encyclopedia. Pictures, photos, videos, interviews, text and other data can be stored on a compact disk. All of this data can then be accessed either by doing a keyboard/subject search or by scanning an index. After a visit to the Lincoln Memorial in Washington, D.C., I walked into the family room only to find my daughter viewing a video about the Memorial that she found on the CD-ROM encyclopedia.

The number of educational computer games has mushroomed. These games provide opportunities for exploring, questioning/hypothesizing, testing hypotheses and evaluating results. Furthermore, these games are now much more sophisticated than earlier "run and shoot" games. Many games require reading and discussion in order to solve and evaluate the problem. The verbal and social interactions that occur while playing the games may be more important than the games themselves. Games and multipurpose software can be found in museums and libraries, as well as homes. The opportunity for widespread usage exists in these environments.

Computer tools and games are extremely flexible and provide the user with a great deal of latitude. They also, however, require the user to examine personal needs prior to using the tool. Computers do not think for you; they are tools with which to think. The preplanning and "what if" possibilities may be quite useful in helping children control metacognitive problems dealing with knowing what one needs to know. On the other hand, children tend to be intuitive and impulsive rather than rational and reflective. The reflection required by computers may frustrate many children. I suggest using these tools as a parent-child team whenever an occasion arises that calls for planning and speculation. Although my daughter has been using computers for many years, some detailed processes still escape her ability to predict problems (yet I believe her ability in this area has greatly improved through computer use). For example, using a drawing program we once changed a predrawn cow into a hippopotamus. Either we did not save this creation or it got trashed, but when she wanted it again the picture was nowhere to be found. Having gone through the creation process once, my

daughter was positive she could do it again. She became frustrated, however, by unexplained quirks in the drawing program. Sometimes a more experienced guide is needed to help the child think things through, even if the child is already skilled in this process.

In any case, parents should seek opportunities to work with their children using these tools, rather than only making the tools available. Initially, children may play with the tools simply to see what they will do. Such experimenting is similar to a child hammering nails into scrap wood simply to be using the hammer. The next step may consist of parent and child working through simple problems together so that the child can get a grasp of the software's practical applications. The final step is to try the software out in situations that the child might suggest. This really is quite difficult. Although a child may be quite skilled with the machine, for example, a parent may need to suggest that posters can be generated through computer tools, rather than drawing them by hand.

Internet Access

Of course the newest use of the personal computer is to gain access to the Internet. The Internet has been described as the "information superhighway" or the "dirt road." On the one hand, it is possible to gain quick access to needed information. On the other hand, it is also possible to get lost in a quagmire of irrelevant junk. This vast network of computer files allows access to everything from purchasing airline tickets to planning a trip to the National Zoo. When used correctly, the Internet can be fun, informative and challenging. Or it can be a nuisance and a money pit.

The Internet provides access to information in several forms. The most widely advertised is the World Wide Web (look closely at most television commercials and magazine advertisements and you will find an "address" for a web document[page] ("http://www.spendmoney.com"). But the Web is only one feature of the Internet. Other features include E-mail, news groups and file transfer protocol. This article is too limited to detail each of these functions. We can only say that the Web is simply one of many data sources existing through the Internet (Silvern, in press). Our family has used the Web for entertainment (family surfing, playing games), communication (sending E-mail postcards), getting information for school reports or professional papers, learning new ideas, planning trips/arranging for tickets/transportation/lodging, and even arranging to go to a National League playoff game. The Web is accessible at home through modems, and at libraries and museums.

In the first edition of this book, I discussed, at length, possibilities for using the computer at home in a variety of challenging ways, both as a toy and as a communications device. For the most part, these earlier possibilities have come to fruition. In fact, the computer has long outdistanced the feeble ideas introduced in that earlier version. We now have reached a point in technology applications in which the computer can open nearly any door. It is the ultimate utility device. The issues now facing us are those of access and control.

Computer Access

While computers have gotten bigger and more powerful, their price has not essentially changed. Our family's first home computer was an Atari purchased in the early 1980s. It had 64K of memory, a 5 1/2" floppy disk drive and a monitor. It had no pre-packaged software and nearly everything that we ran on it was keyed in by me. It cost about $2,000. Our most recent computer is a Macintosh 5300cs with 40 megabytes of memory, a 1/2 gigabyte hard drive, 28.8 baud modem and slots for all kinds of accessories, including a CD-ROM drive. It came with all kinds of software built in and other software was easily obtainable at very reasonable prices. It also cost about $2,000. Although the

capabilities of current computers easily outstrip those of older computers, my point is that they remain a luxury of the middle and upper classes. Even with the advent of a $500 Internet box that will access the Internet through your cable TV, computers remain out of reach for some. A news report estimates that only 14.7 million homes are connected to the Internet (Shellenbarger, 1996). Libraries, museums and schools do not have enough computers to ensure equal access to computer technology. In sum, we are creating another divide between the haves and have-nots. We must somehow ensure that all our nation's children and families can benefit from access to computers.

There is a second access issue. Computers are easy to use (my daughter has been using one since before she was 2 years old). Therefore, the potential exists for people to get access to data/information that either was not intended for them or is inappropriate for them. Specialists continue to work to maintain computer security and hackers continue to work to break that security. Children might access files that are inappropriate for them. Also, depending on the service agreement, children's use of the Internet may be a budgetary drain. This access issue leads to the issue of control.

Control

Quite frankly, no substitute exists for parental supervision, regardless of whether it is access to television, radio, movies or computers. Granted, we cannot always be present, yet limits can be set and expectations adopted. In our house, we frown on violent TV. Our daughter has adopted this attitude—after all, the significant people in her life find it offensive—and changes the channel if the program is violent. I must also add that this is a rare example because we only turn on the TV with the intent of watching a particular program. Our family believes that channel surfing is an activity that only can be justified with the excuse of being "brain dead." Similar expectations can be applied to computer use. Either one uses the "Net" for a particular purpose ("I need to find . . . ") or one engages in Net surfing as a family activity. In the same vein, the computer can be put in a place where everyone has access to it, such as the family room, so that computer activity can be monitored easily—without resorting to snooping.

In addition, connect-time monitors clearly show, on screen, how much time the computer has been connected to the Net for the month. It is then apparent if the family is over budget in computer use. Software packages are available that block out net locations/documents that families may find objectionable. Remember, however, that these cannot substitute for a parent making clear guidelines for computer use.

Other Informal Learning Settings

While the family is the most important informal learning setting, other settings can make excellent use of the microcomputer. These settings may include museums, libraries, zoos, theme parks and fairs. Epcot Center's Land of Imagination, for example, provides excellent potential for computer use through an elementary drawing system that is controlled by a light pen and an abbreviated touch-pad keyboard. The communication centers at Epcot that use computers to quiz users are less effective. Computers at tourist information centers, airports and train stations provide tourists with information, as well as tickets. These are examples of microcomputers used in informal settings.

Computers' potential in these informal environments is powerful because their environment has greater resources for computer equipment and programming than homes do. Planners of these informal environments, however, must be imaginative in order to get the most informal learning advantage. Many museums started computer programs to teach children and adults about computers. Essentially, they were fulfilling a need not met by schools. Informal settings can take one beyond current knowledge. These

settings have the ability to stretch the imagination, rather than simply providing information. Living history exhibits, such as Williamsburg or Vicksburg National Historical Park, transport visitors to a different time. Computers in informal environments may transport users in similar ways. In order to do so, however, the computer must be seen not as a transmitter of information or a quiz machine, but rather as an element that will help individuals to think in a particular way.

What about a machine that produces different images or sounds depending on how and where it is touched? Could individuals become instant composers of music, poetry or stories that are printed with their names on them? Might one be able to find an animal in the wild, search for its hiding place and look for its track? Could one decide on the items needed for an exploration of the Northwest Passage? Could one design a robot that would make a job easier? Or could an individual give the robot instructions that would make it useful, as opposed to a nice toy that runs into walls and says, "Excuse me, madam"?

The key to using microcomputers in informal settings, actually in all settings, is to see the machine as a tool or toy that makes possible things that were formerly impossible. Computer consumers need to focus on their specific needs. If the microcomputer is designed to help the user accomplish a specific task in a way that matches the user's capability, the extent of usage appears to be limitless. Finally, the machine must be viewed as a toy in its best sense; namely, something that is non-threatening, enjoyable, entertaining and that provides information or a service we find useful.

References

Jones, I., & Pellegrini, A. D. (1996). The effects of social relationships, writing media, and microgenetic development on first-grade students' written narratives. *American Educational Research Journal, 33*, 691-718.

Shellenbarger, S. (1996, November 25). Internet is knowing where he's sitting, but not where he is. *Birmingham News*, pp. C8-C9.

Silvern, S. B. (in press). Educational implications of play with computers. In D. Fromberg & D. Bergen (Eds.), *Play from birth to twelve: Contexts, perspectives, and meanings* (pp.). New York: Garland.

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